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SECRETARY OF THE AIR FORCE**

**AIR FORCE INSTRUCTION 11-2HC-130J,
VOLUME 2**



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Flying Operations

***HC -130J--AIRCREW EVALUATION
CRITERIA***

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Chapter 1

GENERAL INFORMATION

1.1. General. This volume provides flight examiners and aircrews with procedures and evaluation criteria/tolerances to be used during both flight and ground phases of initial and periodic evaluations. All HC-130J evaluations will be conducted according to this volume and AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, as supplemented. Specific areas for evaluation are prescribed to ensure an accurate assessment of the proficiency and capabilities of aircrews. Flight examiners use this document when conducting aircrew evaluations. Instructors use this document when preparing aircrews for qualification.

1.2. Applicability. This volume is applicable to all individuals performing crew duties on HC-130J and assigned Back-up Aircraft Inventory (BAI) aircraft.

1.3. Key Words and Definitions.

1.3.1. "Will" and "Shall" indicate a mandatory requirement.

1.3.2. "Should" is normally used to indicate a preferred, but not mandatory, method of accomplishment.

1.3.3. "May" indicates an acceptable or suggested means of accomplishment.

1.3.4. "Note" indicates operating procedures, techniques, etc., considered essential to emphasize.

1.4. Waivers. Waiver authority for this publication is the MAJCOM/A3, IAW AFI 11-202 Vol 2. Waivers will be requested from the parent MAJCOM Stan/Eval through appropriate channels. Waiver authority for supplemental guidance will be as specified in the supplement and approved through the higher level coordination authority.

1.5. Procedures.

1.5.1. Flight examiners will use the criteria contained in this volume for conducting all flight, simulator, and emergency procedures evaluations. To ensure standard and objective evaluations, flight examiners will be thoroughly familiar with the prescribed evaluation criteria.

1.5.2. Unless specified in AFI 11-2HC-130JV1, *Aircrew Training* or AFI 11-2HC-130JV3, *Operations Procedures*, the examinee or flight examiner may fly in any seat that will best enable the examiner to conduct a thorough evaluation.

1.5.3. Before the Aircraft Commander Briefing, the evaluator will inform the aircraft commander of any special requirements. Flight examiners will brief the examinee on the conduct, purpose, and requirements of the evaluation, as well as all applicable evaluation criteria, prior to flight. The examinee will accomplish all required mission planning. If an Operations Planning Team (OPT) or Deployment Planning Team (DPT) accomplishes mission planning, the examinee is ultimately responsible for the accuracy and completeness of all mission-planning paperwork. Flight examiners will be furnished a copy of necessary charts, flight logs, mission folders, and any additional items they require.

1.5.4. Flight examiners will not intentionally fail any equipment during flight evaluations, but may deny the use of systems not affecting safety of flight.

1.5.5. Flight examiners will thoroughly debrief/critique all aspects of the flight. During the critique, the flight examiner will review the examinee's overall rating, specific deviations, area/sub area grades assigned, and any additional training required.

1.5.6. When grading criteria specify that airspeed will be evaluated and the flight manual lists only minimum/maximum/recommended airspeed for that area, the examinee will brief the desired airspeed, if applicable.

1.5.7. Under no circumstances will a pilot flight examiner allow the aircraft to slow to below one engine inoperative air minimum control speed (V_{mca}), regardless of airspeed tolerances listed for specific areas.

1.6. Grading Instructions.

1.6.1. The grading system for most areas in this volume is a three-level system (Q/Q-/U). Areas identified as "Critical" in [Table 2.1](#) through [Table 2.5](#) have a two-level system (Q/U). If the examinee receives a U in any critical area, assign an overall Qualification Level 3 (Q-3).

1.6.2. Required areas are indicated with an "R" in [Table 2.1](#) through [Table 2.5](#) for specific evaluations. All required areas must be evaluated. Refer to crewmember specific chapter for additional guidance. Flight examiners may evaluate any other areas observed, at their discretion. When it is impossible to evaluate a required area in the aircraft due to equipment malfunctions, operational requirements, scheduling restrictions, or weather, that area may be evaluated by an alternate method (simulator, procedural trainer, or verbal examination) unless otherwise noted. If, in the flight examiner's judgment, a required item cannot be adequately evaluated by an alternate method, complete the evaluation on an additional flight. If a required item is not accomplished, the evaluator will place a comment in the Additional Comments portion of the AF Form 8, *Certificate of Aircrew Qualification*.

1.6.3. The flight examiner will compare the examinee's performance for each area with the standards provided in this volume and assign an appropriate grade for the area. Derive the overall flight evaluation grade from the area grades based on a composite for the observed events and tasks IAW AFI 11-202V2 and this volume.

1.6.3.1. To the maximum extent possible, flight examiners will use the grading criteria in this volume to determine individual area grades. Exercise judgment when the wording of areas is subjective and when specific areas are not covered.

1.6.3.2. Flight examiner professional judgment will be the determining factor in arriving at the overall grade.

1.6.3.3. Base tolerances for in-flight parameters on conditions of smooth air and a stable aircraft. Do not consider momentary deviations from a tolerance, provided the examinee applies prompt corrective action and such deviations do not jeopardize flying safety. Consider cumulative deviations when determining the overall grade.

1.7. Additional Training.

1.7.1. Flight examiners are responsible for assigning additional training, at their discretion. Document additional training IAW AFI 11-202V2. Any approved training device or medium may be used for additional training.

1.7.2. When unique situations (such as crosswind landings) present valuable training opportunities, additional training may be accomplished on an evaluation flight. However, this option requires flight examiner discretion and judicious application. The examinee must be informed when the additional training begins and ends.

1.8. Unsatisfactory Performance.

1.8.1. Dependent upon the item requiring the recheck, rechecks may be accomplished on the ground or in flight at the discretion of the flight examiner. Rechecks should normally be administered by a flight examiner other than the one who administered the original evaluation.

1.8.2. If the flight examiner observes an aircrew counterpart jeopardizing safe flight, the examiner will assume the duties of that aircrew member (provided the examiner's flight duty period [FDP] does not exceed AFI 11-202V3, *General Flight Rules*, Table 9.1 maximum FDP for an un-augmented crew). This does not mean the examiner must assume the examinee's position any time unsatisfactory performance is observed. If the examiner feels the examinee can continue safely with supervision, the examiner is not required to assume the examinee's duties. However, if the flight examiner assumes the examinee's duties, assign a Qualification Level 3 (Q-3) as the overall grade.

1.8.3. Evaluators will report deviations/discrepancies from established procedures/directives in any area, regardless of the individual's crew specialty, to squadron/group commander for evaluation and necessary action in accordance with MAJCOM supplement to AFI 11-202V2.

1.9. Emergency Procedures Evaluation (EPE). Conduct EPEs for all requisite flight evaluations. The EPE will include areas commensurate with the examinee's qualification and experience level.

1.9.1. Flight examiners may conduct EPEs verbally, in-flight, in a simulator, or by another method determined by the examiner or unit Stan/Eval. Flight examiners determine EPE content and individual EPE areas. OGVs may develop EPE guides for each crew position flight examiner use. All crew positions with BOLDFACE procedures will accurately recite/write the applicable BOLDFACE procedures.

1.9.1.1. EPEs should be scenario driven, and tailored to the specific crew position. Emphasize emergency procedures and systems knowledge, related to the situation. For mission evaluations, evaluate mission-specific equipment and situations.

1.9.1.2. Examinees may use publications that are normally available in-flight. The examinee will recite all BOLDFACE items from memory and should provide the initial steps of emergency procedures that, in the opinion of the examiner, would not allow time for reference.

1.9.2. EPEs will include sufficient in-flight and ground emergencies to evaluate the examinee's knowledge of systems and procedures to the flight examiner's satisfaction.

1.9.3. Tailor mission evaluation scenarios to unit tasking and include areas not normally evaluated in flight, such as defensive systems operation (if applicable), threat interpretation, and evasive action (mission evaluations only).

1.9.4. The following grading criteria will be used to grade individual items on EPEs for all crew positions **Exception:** for BOLDFACE use grading criteria in Area 18).

1.9.4.1. Q-1. Satisfactory systems/procedural knowledge. Operated within prescribed limits and correctly diagnosed problems. Performed and/or explained proper corrective action, in the proper sequence, for each type of malfunction. Accomplished all required checklists and/or effectively used available aids. Thoroughly described the location, use and limitations of emergency equipment.

1.9.4.2. Q-2. Marginal systems/procedural knowledge. Slow to analyze problems or apply proper corrective actions. Did not effectively use checklist and/or available aids. Minor omissions or deviations in describing the location, use and limitations of emergency equipment.

1.9.4.3. Q-3. Unsatisfactory systems/procedural knowledge. Unable to analyze problem or take corrective action. Failed to accomplish required checklists and/or unable to locate information in available aids. Major omissions or deviations in describing the location, use and limitations of emergency equipment.

1.10. Special Qualifications. Special qualification evaluations are administered for event qualifications that are not universal to all crew positions in the airframe, to all members in that crew position, or to all units. Special qualification evaluations may be conducted separately or in conjunction with the qualification/mission evaluation. After initial qualification, special mission events will be incorporated into subsequent periodic qualification and/or mission evaluations IAW [Table 2.3](#) thru [Table 2.5](#) and the applicable crew chapters of this instruction. There are no requisites for special qualification evaluations.

1.10.1. Refer to the appropriate crew position chapters of this instruction for any special qualifications evaluation requirements.

1.10.2. Special qualification evaluations will be annotated as a “SPOT” evaluation in a separate Flight Phase block of the AF Form 8. Further define the specific evaluation in the Mission Description section of the Comments block on the AF Form 8.

1.11. Instructor Certified Events. These are events that require certification of training by an instructor or flight examiner, not an evaluation as described in paragraph [1.11](#) Document certification per MAJCOM supplement to AFI 11-202V1, *Aircrew Training*, AFI 11-202V2. Refer to AFI 11-2HC-130J, Volume 1, *HC-130J Aircrew Training*, for a listing of instructor certified events.

1.12. Examinations. All crew members will complete open and closed book examinations as a requisite to periodic evaluations. Combat Systems Operators (CSO) and Loadmasters (LM) will complete combined QUAL/MSN examinations. Pilots must complete separate open and closed book examinations as a requisite to periodic QUAL and MSN evaluations. Conduct requisite examinations IAW AFI 11-202, Volume 2 *Program*, as supplemented.

1.14.1. **Examination Requirements.** Except for the instrument examination (conducted IAW AFMAN 11-210), open and closed book examinations will contain a minimum of 40 test questions.

1.14.2. Examination requirements for formal school initial, requalification and upgrade courses will be IAW approved syllabi of instruction.

Chapter 2

EVALUATION REQUIREMENTS

2.1. General.

2.1.1. All evaluations will follow the guidelines set in AFI 11-202V2 as supplemented, and this volume. **Table 2.1** thru **Table 2.5** depict specific grading areas for all crew positions evaluations. Use criteria in the appropriate crew position chapter for evaluations.

2.1.2. Administer aircrew evaluations on any flight that as scheduled will accomplish all required items for that evaluation. Mission evaluations should be as realistic as possible with a minimum of simulated events. Do not deviate from peacetime restrictions.

2.1.3. In accordance with AFI 11-290, *Cockpit/Crew Resource Management Training Program*, crew resource management (CRM) skills will be evaluated during initial and periodic evaluations. CRM skills are integral to all phases of flight; therefore no specific area titled CRM exists. Document CRM discrepancies under the seven CRM skills areas: mission planning, airmanship/situational awareness, crew coordination, communication, risk management/decision making, task management, and briefing/debriefing. Evaluators should reference AF Form 4031, *CRM Skills Criteria Training/Evaluation Form*, and AFI 11-290 for further clarification.

2.2. Required Evaluations.

2.2.1. Pilots will be given a combined INSTM/QUAL evaluation and a separate MSN evaluation.

2.2.2. CSO and loadmasters will be given a combined QUAL/MSN evaluation.

2.2.3. Instructor evaluations are conducted IAW AFI 11-202V2, as supplemented and **Chapter 3** of this instruction. Thoroughly evaluate the examinee's instructor knowledge and ability. Evaluate instructor candidates on a sortie with a representative sampling of unit's basic and/or mission maneuvers that permit accomplishment of all required instructor areas IAW **Table 2.2** Upon successful completion of the Instructor evaluation, award the crew position of IP for pilots, IN for CSOs and IL for Loadmasters on their Form 8. If it is done in conjunction with an INSTM/QUAL, MSN, or QUAL/MSN checkride use the instructor crew position on the Form 8.

2.3. Currency of Flight Publications. Evaluate all required in-flight publications, including checklists, for currency and accuracy on all flight evaluations. Required flying publications are specified in AFI 11-2HC-130J, Volume 3, *HC-130J--Operations Procedures*.

2.4. Formal Course Evaluations. Fly syllabus evaluations IAW syllabus mission profile guidelines if stated, or on a mission profile developed from syllabus training objectives. All required areas must be evaluated for the type of evaluation being flown, IAW guidance in this volume. Grade training objectives and related areas using the performance criteria in this volume. Formal course guidelines may be modified, based on local operating considerations or examiner judgment, to complete the evaluation.

Table 2.1. General Grading Areas (All Crew Positions and All Evaluations).

	Notes	Grading Areas	
1		Safety - CRITICAL	R
2		Aircrew Discipline - CRITICAL	R
3		Airmanship/Situational Awareness - CRITICAL	R
4		Crew Coordination/Flight Integrity	R
5		Flight/Mission Planning	R
6		Knowledge of Directives	R
7		Preflight	R
8		Use of Checklist	R
9		Forms/Reports/Logs	R
10		Personal/Professional Equipment/Flight Publications	R
11	1	Emergency Equipment/Procedures	R
12	2	Briefings/Debriefings	R
13	3	Communications/Operations Security	R
14		Anti-Hijacking/Aircraft Security	R
15		Communication	R
16		Risk Management/Decision Making	R
17		Task Management	R
18		BOLDFACE - CRITICAL	R
19-20		Reserved for future use	

NOTES:

1. Grade if observed. Not required if evaluated as part of the EPE.
2. Required for all crew positions responsible for presenting briefings/debriefings.
3. Required for mission evaluations only.

Table 2.2. Instructor Evaluation Grading Areas (All Crew Positions).

	Notes	Grading Areas	
21		Mission Preparation	R
22		Instructional Ability	R
23		Instructor Knowledge	R
24		Briefings/Debriefings/Critique	R
25		Demonstration of Maneuvers/Procedures	R
26-30		Reserved for future use	

Table 2.3. Pilot Grading Areas.

	Notes	Grading Areas	INSTM/ QUAL	MSN	AAR
31		Reserved for future use			
32		Pre-Takeoff	R	R	
33		Takeoff	R	R	
34		Departure	R	R	
35		En route Navigation/Use of NAVAIDS	R	R	
36		Descent	R	R	
37		Holding/Procedure Turn	R		
38		Arrival Procedures (Instrument Flight Rules)	R		

39	1	Non-Precision Approach	R		
40		Circling/Side-Step Approach	R		
41	1	Precision Approach	R		
42		Visual Flight Rules (VFR) Procedures/Patterns	R		
43		Engine-Out Approach	R		
44	3	50 and 100 Percent Flap Landing	R		
45		No Flap Landing	R		
46		Engine-Out Landing	R		
47		Touch-and-Go Landing	R		
48		Missed Approach/Go-Around	R		
49		Engine-Out Go-Around	R		
50		After Landing/Engine Shutdown	R	R	
51		Air to Air Refueling (AAR) Procedures (receiver)			R
52		Communication/Interrogation Friend or Foe/Secure Interrogator Friend	R	R	
53		Reverse Taxi			
54		Defensive Systems/Tactics		R	
55		Threat Analysis/ Avoidance		R	
56		Night Vision Goggles (NVG) Usage/Limitations		R	
57		Airdrop Procedures		R	
58		Slowdown		R	
59		Escape		R	

60		Sea Rescue MA-1/2 Kit Deployment			
61		Parabundle Delivery			
62		Freefall Delivery			
63		Pararescue (PJ) Directed Airdrop			
64		Helicopter Air to Air Refueling (HAAR) Procedures		R	
65	2	NVG Airland		R	
66		Tactical Recovery (Self Contained Approach (SCA), Integrated Precision Radar Approach (IPRA), overhead, downwind, random shallow/steep)		R	
67	2	Max Effort Procedures		R	
68	2	Max Effort Takeoff		R	
69	2	Max Effort Landing		R	
70		NVG Low level		R	
71		Automation Management	R	R	
72	4	Category 2 Instrument Landing System (ILS)	R		
73		Time Control		R	
74		Takeoff and Landing Data (TOLD)	R	R	
75		Fuel Planning	R		
76-100		Reserved for future use			

NOTES:

1. Do not evaluate a precision approach (PAR) as the only precision approach when the non-precision approach evaluated is the airport surveillance radar (ASR). Do not evaluate an ASR as the only non-precision approach when the precision approach evaluated is the PAR.
2. Maximum effort takeoff and landing may be flown in conjunction with NVG airland operations.
3. Both a 50 and a 100 percent landing will be accomplished during INSTM/QUAL evaluations.
4. Required if qualified.

Table 2.4. Combat System Operator Grading Areas.

	Notes	Grading Areas	QUAL/ MSN
101		Flight Plan/Airdrop Data/Charts	R
102		Fuel Planning	R
103		Departure	R
104		Navigation Procedures	R
105		Radar/Digital Map/Common Cursor Operations	R
106		Fuel Management/Range Control	R
107		Descent/Approach/Landing	R
108		Communication Procedures/Radio Transmission Usage and Discipline	R
109	1	Self-Contained Approach (SCA) Procedures	R
110		Defensive Systems/Tactics	R
111		Threat Analysis/Avoidance	R
112	1,2	Air to Air Refueling (AR) Procedures (receiver)	
113	1	Helicopter Air to Air Refueling (HAAR) Procedures	R

114	1	Airdrop Procedures	R
115		Night Vision Goggle (NVG) Usage/Limitations	R
116		Search Data Computations	
117		Search Pattern	
118		Time Control	R
119		MTS-A Operations	
120		Secure Voice, HAVE QUICK, Satellite Communications (SATCOM)	
121		Authentication, Encode/Decode	
122		Forward Area Refueling Point (FARP)	
123-150		Reserved for future use	
NOTES: 1. Areas must be evaluated in-flight at least every other evaluation. 2. Required if certified in the event.			

Table 2.5. Loadmaster Mission/Qualification Grading Areas.

	Notes	Grading Areas	QUAL/ MSN
201		Aircrew Flight Equipment	R
202		Aircraft Configuration	R
203		Load Planning/Inspection	R
204		On/Off Loading Procedures	R
205		Supervisory Abilities	
206		Tie Down/Restraint	R
207		Winching Procedures	R

208		Hazardous Material	R
209		Aircraft Limitations	R
210		Passenger Handling	
211		Border Clearance	R
212		Weight and Balance	R
213		Scanner Duties	R
214		Air to Air Refueling (AAR) Procedures (receiver)	
215		Engine Running Onload/Offload	R
216		System Knowledge	R
217		Airdrop Rigging Procedures	R
218		Joint Airdrop Inspection	R
219		Coordinated Tasks Briefing	
220		Airdrop Knowledge	R
221		NVG Usage/Limitations	R
222		Helicopter Air to Air Refueling (HAAR) Procedures	R
223		Combat Search and Rescue (CSAR)/Search Scanning Procedures	R
224		Pyrotechnics	R
225		Combat Offload	R
226		Defensive Tactics/Threat Calls	R
227	1	FARP	R
228	1	Hot Refueling	R

229	1	Infiltration/Exfiltration Procedures	R
230-250		Reserved for future use.	
NOTE: 1. Only required if qualified/certified in this event.			

2.5. AETC. AETC instructors (58 SOW) are considered dual qualified in the HC-130J and MC-130J once they have completed the 58 SOW differences training program. 58 SOW instructors may receive their periodic evaluations in either the HC-130J or MC-130J.

Chapter 3

ALL EVALUATIONS

3.1. General. The general and instructor grading criteria contained in this chapter apply to all crew positions and all evaluations.

3.2. Objective. The examinee must satisfactorily demonstrate the ability to perform required duties safely and effectively, including the operation of appropriate aircraft systems, IAW applicable technical orders, instructions, and directives.

3.3. Requirements. Evaluate all crewmembers on areas listed in **Table 2.1**, and instructors on areas listed in **Table 2.2** Aircrew members conducting evaluations in units north of the 60 degree parallel who enter their in phase period between 1 April and 30 September may conduct the periodic mission evaluation as a day visual route every other evaluation. An NVG low level in mountainous terrain will be conducted every other year (or evaluation). Every attempt should be made to conduct a NVG low level route every periodic evaluation.

3.4. General Grading Criteria.

3.4.1. Area 1. Safety - (CRITICAL)

3.4.1.1. Q. Was aware of and complied with all safety factors required for safe aircraft/equipment operation and mission accomplishment. Identified and assessed risk appropriately. Properly considered consequences of decisions.

3.4.1.2. U. Not aware of or did not comply with all safety factors required for safe aircraft/equipment operation or mission accomplishment. Failed to properly identify and assess risk. Failed to consider consequences of decisions. Operated the aircraft/equipment in a dangerous manner.

3.4.2. Area 2. Aircrew Discipline - (CRITICAL).

3.4.2.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.

3.4.2.2. U. Failed to exhibit strict flight and crew discipline. Violated or ignored rules or instructions.

3.4.3. Area 3. Airmanship/Situational Awareness - (CRITICAL).

3.4.3.1. Q. Executed the assigned mission in a timely, efficient manner. Anticipated situations that would have adversely affected the mission, and corrected them. Made appropriate decisions based on available information. Recognized the need for action. Aware of performance of self and other flight members. Aware of on-going mission status. Recognized, verbalized and acted on unexpected events.

3.4.3.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Did not recognize the need for action. Not aware of performance of self and other flight members. Not aware of on-going mission status. Failed to recognize, verbalize and act on unexpected events.

3.4.4. Area 4--Crew Coordination/Flight Integrity.

3.4.4.1. Q. Provided direction/information when needed. Adapted to meet new situational demands and focused attention on the task. Asked for inputs, and made positive statements to motivate crew members. Coordinated effectively with other crewmembers without misunderstanding, confusion, or undue delay.

3.4.4.2. Q-. Crew coordination was limited though adequate to accomplish the mission. Provided limited direction/information when needed. Slow to adapt to meet new situational demands due to limited focus on task. Did not consistently seek inputs from other crew members. Limited effort to motivate crew members through positive statements.

3.4.4.3. U. Did not provide direction/information when needed. Did not adapt to meet new situational demands and focus attention on the task. Did not ask for inputs. Made no effort to make positive statements to motivate crew members. Resulting lack of crew coordination resulted in significant degradation of mission accomplishment.

3.4.5. Area 5. Flight/Mission Planning.

3.4.5.1. Q. Clearly defined the mission overview and mission goals. Provided specific information on what needed to be done. Solicited feedback from other crewmembers to ensure understanding of mission requirements. Thoroughly critiqued plans to identify potential problem areas and ensured all had an understanding of possible contingencies. Checked all factors applicable to flight such as flight information publications (FLIP), weather, notice to airman system (NOTAMS), alternate airfields, flight logs, performance data, fuel requirements, and charts. When required, extracted necessary information from air tasking order/frag. Aware of the available alternatives if unable to complete the flight/mission as planned. Read and initialed all items in the flight crew information file (FCIF)/read files. Prepared at briefing time.

3.4.5.2. Q-. Did not adequately define the mission overview and mission goals. Potential problem areas partially addressed or not at all. Did not adequately solicit feedback or critique the plans to ensure understanding of possible contingencies. Minor errors or omissions detracted from mission effectiveness, but did not affect mission accomplishment. Limited knowledge of performance capabilities or approved operating procedures/rules.

3.4.5.3. U. Did not define the mission overview and goals. Lack of specific information on what needed to be done. Did not solicit feedback from other crewmembers to ensure understanding. Did not critique plans to identify potential problem areas. Major errors or omissions would have prevented a safe or effective mission. Unsatisfactory knowledge of operating data or procedures. Did not review or initial Go/No Go items. Not prepared at briefing time.

3.4.6. Area 6. Knowledge of Directives.

3.4.6.1. Q. Prepared and completed mission in compliance with existing instructions and directives. Demonstrated knowledge of operating procedures and restrictions and where to find them in the correct publications.

3.4.6.2. Q-. Minor deviations to established procedures. Unsure of some directives and/or had difficulty locating some information in appropriate publications. Any instances of non-compliance did not jeopardize safety.

3.4.6.3. U. Unaware of established procedures and/or could not locate them in the appropriate publication in a timely manner. Failed to comply with a procedure that could have jeopardized safety or mission success.

3.4.7. Area 7. Preflight.

3.4.7.1. Q. Completed systems preflight/inspections IAW tech orders, checklists, and instructions. Individual technique complied with established procedures.

3.4.7.2. Q-. Minor deviations from established systems pre-flight/inspection. Individual technique was safe, but detracted from established procedures. Used individual technique instead of established procedure and was unaware of differences.

3.4.7.3. U. Failed to preflight critical component or could not conduct a satisfactory preflight/inspection. Individual techniques unsafe and/or in violation of established procedures.

3.4.7.4. Sub Areas. Prior to Entering, Interior Inspection, Exterior Inspection/Top of Airplane, Power Up, Initial Preflight, Airdrop Prep (MSN or QUAL/MSN only)

3.4.8. Area 8. Use of Checklist.

3.4.8.1. Q. Consistently used the correct checklist and gave the correct response at the appropriate time throughout the mission.

3.4.8.2. Q-. Checklist responses were untimely and/or crewmember required continual prompting for correct responses.

3.4.8.3. U. Used incorrect checklist or consistently omitted checklist items. Was unable to identify the correct checklist to use for a given situation. Omitted or did not complete checklist(s) at the appropriate time.

3.4.9. Area 9. Forms/Reports/Logs.

3.4.9.1. Q. All required forms and/or flight plans were complete, accurate, readable, accomplished on time and IAW applicable directives. Related an accurate debrief of significant events to applicable agencies (Intel, Weather, Maintenance, etc.).

3.4.9.2. Q-. Minor errors on forms and/or flight plans did not affect conduct of the flight/mission. Incorrectly or incompletely reported some information due to minor errors, omissions, and/or deviations.

3.4.9.3. U. Did not accomplish required forms and/or flight plans. Omitted or incorrectly reported significant information due to major errors, omissions, and/or deviations.

3.4.10. Area 10. Personal/Professional Equipment/Flight Publications.

3.4.10.1. Q. Had all required personal and professional equipment. Displayed satisfactory knowledge of the care and use of such equipment and the contents of required publications. Required equipment inspections were current. Publications were current, contained all supplements/changes and were properly posted.

3.4.10.2. Q-. Did not have all required personal/professional equipment or had limited knowledge of the use or the content of required publications. Publications contained deficiencies that would not impact flight safety or mission accomplishment.

3.4.10.3. U. Did not have required personal/professional equipment essential for the mission. Unsatisfactory knowledge of the care and use of equipment or the content of required publications. Required equipment inspections were overdue or equipment was unserviceable. Publications were out dated and/or contained deficiencies that would impact flight safety or mission accomplishment.

3.4.11. Area 11. Emergency Equipment/Procedures.

3.4.11.1. Q. Satisfactory systems/procedural knowledge. Displayed satisfactory knowledge of location and use of emergency equipment. Operated within prescribed limits and correctly diagnosed problems. Performed/expained proper corrective action for each type of malfunction. Effectively used available aids.

3.4.11.2. Q-. Marginal systems/procedural knowledge. Limited knowledge of location and use of emergency equipment. Operated within prescribed limits but was slow to analyze problems or apply proper corrective actions. Did not effectively use, omitted, or deviated in use of checklist and/or available aids.

3.4.11.3. U. Unsatisfactory systems/procedural knowledge. Displayed unsatisfactory knowledge of emergency equipment. Exceeded flight manual limitations. Unable or failed to analyze problem or take proper corrective action. Did not use checklist and/or available aids.

3.4.12. Area 12. Briefings/Debriefings.

3.4.12.1. Q. Contributed to the briefing content to ensure it included all applicable information. Briefings effectively organized and professionally presented in a logical sequence. Covered all pertinent items. Established objectives for the mission. Presented all training events and special interest items. Effectively used available briefing aids. Concluded briefing to allow crew transport on time. Debriefed mission using specific, non-threatening positive and negative feedback on team and individual performance. Provided specific ways to correct errors. Asked for inputs from others. Re-capped key points and compared mission results with mission objectives.

3.4.12.2. Q-. Allowed omission of items pertinent but not critical to the mission. Events out of sequence, hard to follow, some unnecessary repetition. Some difficulty communicating clearly. Did not make effective use of available briefing aids. Limited discussion of training events or special interest items. Dwelled on non-essential items. Not fully prepared for briefing. Debriefed mission without specific, non-threatening positive and negative feedback on individual and team performance. Did not consistently seek input from others. Incomplete or inadequate re-cap of key points and comparison of mission results to mission objectives.

3.4.12.3. U. Failed to conduct/attend required briefings. Failed to use briefing aids. Omitted essential items or did not correct erroneous information that could affect mission accomplishment. Demonstrated lack of knowledge of subject. Briefing poorly organized and not presented in a logical sequence. Presented erroneous information that would

affect safe/effective mission accomplishment. Presentation created doubts or confusion. Failed to discuss training events or special interest items. Late crew transport due to excessively long briefing. Did not provide non-threatening positive and negative feedback during debriefing. Did not seek input from others. Did not re-cap key mission points nor compare mission results to mission objectives.

3.4.13. Area 13. Communications Security (COMSEC)/Operations Security (OPSEC).

3.4.13.1. Q. Demonstrated thorough knowledge of communications/operations security procedures and courier procedures (if applicable). Had positive control of classified documents and information used throughout the mission. Properly stored, handled, and/or destroyed all classified equipment or information generated during the mission. Practiced sound COMSEC/OPSEC during all phases of the mission.

3.4.13.2. Q-. Limited knowledge of COMSEC/OPSEC procedures and/or courier procedures (if applicable). Limited knowledge of proper storage, handling, and destruction procedures would not have resulted in compromise of classified material, and did not impact mission accomplishment.

3.4.13.3. U. Unsatisfactory knowledge of COMSEC/OPSEC. Classified documents or information would have been compromised as a result of improper control by examinee. Unfamiliarity with COMSEC/OPSEC procedures had or could have had a negative impact on mission accomplishment.

3.4.14. Area 14. Anti-Hijacking/Aircraft Security.

3.4.14.1. Q. Explained proper anti-hijacking/aircraft security procedures.

3.4.14.2. Q-. Difficulty explaining proper anti-hijacking/aircraft security procedures.

3.4.14.3. U. Could not explain proper anti-hijacking/aircraft security procedures.

3.4.15. Area 15. Communication.

3.4.15.1. Q. Communicated using precise, standard terminology. Acknowledged all communications. Asked for/provided clarification when necessary. Stated opinions/ideas. Asked questions when uncertain. Advocated specific courses of action. Made positive statements to motivate flight members.

3.4.15.2. Q-. Unclear communication led to repetition or misunderstanding. Slow to ask for or give constructive feedback/clarifications. Inconsistent use of precise, standard terminology. Did not always state opinions/ideas, ask questions when uncertain or make positive statements to flight members.

3.4.15.3. U. Failed to communicate effectively. Continuously interrupted others, mumbled, and/or conduct/attitude was detrimental to communication among crewmembers. Withheld information and failed to ask for/respond to constructive criticism. Failed to use precise, standard terminology. Did not acknowledge all communications. Did not state opinions, ask questions when unsure or attempt to motivate flight members using positive statements.

3.4.16. Area 16. Risk Management/Decision Making.

3.4.16.1. Q. Identified contingencies and alternatives. Gathered and cross checked relevant data before deciding. Clearly stated problems and proposed solutions. Used facts to come up with solution. Involves and informs necessary crewmembers when appropriate. Coordinated mission crew activities to establish proper balance between command authority and crewmember participation, and acted decisively when the situation required.

3.4.16.2. Q-. Partially identified contingencies and alternatives. Made little effort to gather and cross check relevant data before deciding. Did not clearly state problems and propose solutions. Did not consistently use facts to come up with solution. Did not effectively inform necessary crewmembers when appropriate. Did not effectively coordinate mission crew activities to establish a proper balance between command authority and crewmember participation, and acted indecisively at times.

3.4.16.3. U. Failed to identify contingencies and alternatives. Made no effort to gather and cross check relevant data before deciding. Did not inform necessary crewmembers when appropriate. Did not use facts to come up with solution. Avoided or delayed necessary decisions which jeopardized mission effectiveness. Did not coordinate mission crew activities to establish proper balance between command authority and crewmember participation; acted indecisively.

3.4.17. Area 17. Task Management.

3.4.17.1. Q. Correctly prioritized multiple tasks. Used available resources to manage workload. Clearly communicated and acknowledged workload and task distribution. Demonstrated high level of vigilance in both high and low workload conditions. Prepared for expected or contingency situations. Avoided the creation of self-imposed workload/stress. Recognized and reported work overloads in self and others.

3.4.17.2. Q-. Did not consistently and correctly prioritize multiple tasks. Did not effectively use available resources to manage workload. Did not clearly communicate and acknowledge workload and task distribution. Did not consistently demonstrate high level of vigilance in both high and low workload conditions. Slow to prepare for expected or contingency situations. Created some self-imposed workload/stress due to lack of planning. Slow to recognize and report work overloads in self and others.

3.4.17.3. U. Failed to correctly prioritize multiple tasks. Did not use available resources to manage workload. Did not communicate and acknowledge workload and task distribution. Did not demonstrate high level of vigilance in both high and low workload conditions. Extremely slow to prepare for expected or contingency situations. Created self-imposed workload/stress due to lack of planning. Failed to recognize and report work overloads in self and others.

3.4.18. Area 18. BOLDFACE – (CRITICAL).

3.4.18.1. Q. Able to recite/write emergency BOLDFACE items correctly with no discrepancies.

3.4.18.2. U. Unable to recite/write emergency BOLDFACE items correctly.

3.4.19. Area 19 - 20. Reserved for future use.

3.5. Instructor Grading Criteria.

3.5.1. Area 21. Mission Preparation.

3.5.1.1. Q. Thoroughly reviewed student's training folder. Ascertained student's present level of training. Assisted student in pre-mission planning and allowed student time for questions. Correctly prioritized training events. Gave student a clear idea of mission training objectives.

3.5.1.2. Q-. Did not thoroughly review student's training folder or correctly ascertain student's present level of training. Caused student to hurry pre-mission planning. Poorly prioritized training events. Training plan/scenario made poor use of time.

3.5.1.3. U. Did not review student's training folder. Did not ascertain student's present level of training. Did not assist student with pre-mission planning or did not allow time for questions. Did not prioritize training events. Failed to give student a clear idea of mission training objectives, methods, and sequence of events.

3.5.2. Area 22. Instructional Ability.

3.5.2.1. Q. Demonstrated excellent instructor ability and communicated effectively. Provided appropriate guidance when necessary. Planned ahead, and instruction was accurate, effective, and timely. Identified and corrected potentially unsafe maneuvers/situations.

3.5.2.2. Q-. Problems in communication or analysis degraded effectiveness of instruction. Accomplished the above tasks with minor discrepancies that did not affect safety or adversely affect student progress.

3.5.2.3. U. Unable to effectively communicate, provide timely feedback. Perform, teach, assess techniques/procedures/systems use, or tactics to the student. Did not provide corrective action when necessary. Did not plan ahead or anticipate student problems. Did not identify unsafe maneuvers/situations in a timely manner. Made no attempt to instruct.

3.5.3. Area 23. Instructor Knowledge.

3.5.3.1. Q. Demonstrated a high level of knowledge of all applicable aircraft systems, techniques, procedures, missions, and tactics to be performed. Possessed a high level of knowledge of all applicable publications and procedures, and understood how to apply both to enhance mission accomplishment. Completed appropriate training records accurately. Comments were clear and pertinent.

3.5.3.2. Q-. Minor errors/deficiencies in knowledge of above areas did not affect safety or adversely affect student progress. Minor errors or omissions in training records. Comments were incomplete or slightly unclear.

3.5.3.3. U. Lack of knowledge of publications or procedures seriously detracted from instructor effectiveness. Could not apply knowledge of above areas. Did not complete required forms or records. Comments were invalid, unclear, or did not accurately document performance.

3.5.4. Area 24. Briefings/Debriefings/Critique.

3.5.4.1. Q. Briefings were well organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. Showed an excellent ability during the critique to reconstruct the flight, offer mission analysis, and

provide guidance where appropriate. Training grade reflected the actual performance of the student relative to the standard. Pre-briefed the student's next mission, if required.

3.5.4.2. Q-. Minor errors or omissions in briefings and/or critique did not affect safety or adversely affect student progress.

3.5.4.3. U. Briefings/debriefings were marginal or non-existent; major errors or omissions in briefings/debriefings. Did not review student past performance. Analysis of events or maneuvers was incomplete, inaccurate, or confusing. Training grade did not reflect actual performance of student. Overlooked or omitted major discrepancies. Incomplete pre-briefing of student's next mission, if required.

3.5.5. Area 25. Demonstration of Maneuvers/Procedures.

3.5.5.1. Q. Effectively demonstrated procedures and techniques. Provided concise, meaningful, and timely in flight commentary. Had thorough knowledge of applicable aircraft systems, procedures, publications, and instructions.

3.5.5.2. Q-. Performed required maneuvers/procedures with minor deviations from prescribed parameters. In flight commentary was sometimes unclear or poorly timed, interfering with student performance. Discrepancies in the above areas did not adversely affect safety or student progress.

3.5.5.3. U. Was unable to properly perform required maneuvers/procedures. Made major procedural errors. Did not provide in flight commentary and/or in flight commentary was incorrect or unsafe. Depth of knowledge about applicable aircraft systems, procedures, and/or proper source material was insufficient.

3.5.6. Areas 26 - 30. Reserved for future use.

Chapter 4

PILOT EVALUATIONS

4.1. The criteria contained here and in Chapter 3 apply to all pilot flight evaluations. The general criteria contained in [Table 4.1](#) apply during all phases of flight except as noted for specific events and instrument final approaches.

Table 4.1. General Criteria.

Q	Altitude	+/- 100 feet
	Airspeed	+10/- 5 knots (but not less than Vmca)
	Course	+/- 5 degrees
	TACAN Arc	+/- 2 NM
Q-	Altitude	+/- 200 feet
	Airspeed	+15/- 10 knots (but not less than Vmca)
	Course	+/- 10 degrees
	TACAN Arc	+/- 3 NM
U		Exceeded Q- limits

4.2. Objective. IAW the guidelines of this instruction, the examinee must satisfactorily demonstrate the ability to perform all duties safely and effectively, including the operation of appropriate aircraft systems, IAW applicable technical orders, directives and published procedures.

4.3. Requirements.

4.3.1. Instrument/Qualification. See [Table 2.3](#) for required evaluation areas. Upon successful completion of the Instrument/Qualification evaluation, award the crew position of FP on their Form 8.

4.3.1.1. Initial/Re-Qualification Evaluations. C-130J basic initial/re-qualification and instructor upgrade are formal training courses. Initial/re-qualification evaluations update the eligibility for instrument/qualification evaluations. If an initial or re-qualification (return to active flight duties) evaluation is administered in-unit, all required areas from [Table 2.3](#) must be evaluated. The unit commander determines the minimum events due to “Q-3” or “out of eligibility” re-qualification. Instructor upgrades evaluations may update the eligibility for instrument/qualification if requirements in paragraph [4.3.1.2](#) are met. Evaluations may be conducted in any C-130J variant or in a certified C-130J type weapon system trainer (WST).

4.3.1.2. **Periodic Instrument/Qualification Evaluations.** Instrument evaluations may not be conducted separately from qualification evaluations. Pilot instrument/qualification evaluations should include approaches to airfields other than home station or deployed locations, if possible. Do not complete a periodic instrument qualification evaluation unless, as a minimum, the following are observed in flight: an instrument takeoff, one precision approach; one non-precision approach; Cat 2 ILS (if qualified), holding or procedure turn; circling and VFR pattern; touch and go procedures; both a 100 and 50 percent flap landing; a simulated 3-engine instrument approach, landing, and go-around and a no flap approach and landing. Do not combine the precision and Category II approaches. One of the approaches will be flown without use of the autopilot and autothrottles. Initial CAT II qualification evaluations require an approach to a missed approach and an approach to a landing. CAT II procedures may be evaluated on a CAT I approach. Basic qualified pilots may conduct their periodic INSTM/QUAL evaluation from either seat. Evaluations may be conducted in any C-130J variant or in a certified C-130J type WST.

4.3.2. **Mission.** See [Table 2.3](#) for required evaluation areas. Upon successful completion of the Mission evaluation, award the crew position of MP on their Form 8.

4.3.2.1. **Requirements for All Mission Evaluations.** The requirements listed below in paragraphs [4.3.2.1.1](#) thru [4.3.2.1.4](#) are applicable to all initial/requalification and periodic mission evaluations.

4.3.2.1.1. HAAR will include a rendezvous and join up with an actual helicopter; completion of the pre-contact, contact and post air refueling checklist; and a minimum of one wet/dry contact. **Exception:** The requirement for a wet/dry contact may be waived by the evaluator if they determine that receiver ability precluded a successful probe to drogue contact. Maximum Effort Procedures. If a landing zone is not available, a larger runway with clearly identifiable 500 foot touchdown zone may be used. This event is normally accomplished as part of the mission evaluation. NVG takeoff/landing may be credited if flown to max effort standards. One go-around is permitted, provided the aircraft does not touch down short of the zone.

4.3.2.1.2. At a minimum, NVG airland requires both an NVG landing and takeoff. Normal or maximum effort procedures may be used.

4.3.2.1.3. Document which tactical events were flown and the type of terrain (mountainous or non-mountainous) in which the mission was flown in the comments section of the AF Form 8.

4.3.2.1.4. Mission evaluations may be conducted from either seat, however Max Effort landings will be conducted from the left seat. **Exception:** periodic IP evaluation may accomplish Max Effort from either seat.

4.3.2.1.5. Initial Mission evaluation may be conducted in an HC-130J or MC-130J aircraft.

4.3.2.2. **Initial/Re-qualification Mission Evaluations.** Initial/re-qualification mission qualification is conducted at an AETC formal school or in-unit with MAJCOM waiver and updates the eligibility for the mission evaluation. If an initial or re-qualification (return to active flight duties) evaluation is administered in-unit, all required areas from

Table 2.3 must be evaluated. The in-flight evaluation profile will include an NVG low-level route flown in mountainous terrain to a time on target/arrival (TOT/TOA) event, an HAAR, a system airdrop, a tactical recovery/SCA, NVG airland and a maximum effort takeoff and landing.

4.3.2.3. **Periodic Mission Evaluations.** The in-flight evaluation profile will include an NVG modified-contour low level flown to a time on target/arrival (TOT/TOA) event, a maximum effort takeoff and landing, a tactical recovery, NVG airland and either an AAR, HAAR or a computed air release point (CARP) airdrop. Airdrop, AAR (if qualified) and HAAR will be evaluated in-flight at least every other periodic evaluation. The low level will be flown in mountainous terrain at least every other periodic evaluation.

4.3.3. **Special Qualifications Evaluations.**

4.3.3.1. **Air to Air Refueling Contact is a Special Mission Qualification.** Once accomplished, it will be incorporated into the periodic evaluation.

4.4. Grading Criteria. See **Table 2.3** for applicability to instrument/qualification or mission evaluations.

4.4.1. **Areas 1 through 20 --** use general evaluation grading criteria in **Chapter 3** of this volume.

4.4.2. **Areas 21 through 30--** use instructor evaluation grading criteria in **Chapter 3** of this volume (if applicable).

4.4.3. **Area 31. Reserved for future use.**

4.4.4. **Area 32. Pre-Takeoff.**

4.4.4.1. Q. Established and adhered to station, starting engines, taxi, and take-off times to assure thorough preflight, check of personal equipment, crew/passenger briefings, etc. Accurately determined readiness of aircraft for flight. Completed all systems preflight/postflight inspections and checklists IAW flight manual. Conducted taxi operations according to flight manual, AFI 11-218, *Aircraft Operations and Movement on the Ground*, and published procedures.

4.4.4.2. Q-. Same as above except for minor procedural deviations that did not detract from mission effectiveness.

4.4.4.3. U. Failed to accurately determine readiness of aircraft for flight. Major deviations or omissions occurred which could have jeopardized safety. Crew errors directly contributed to a late takeoff that degraded the mission or made it ineffective.

4.4.5. **Area 33. Takeoff.**

4.4.5.1. Q. Maintained smooth, positive aircraft control throughout takeoff. Performed takeoff in accordance with flight and performance manual procedures.

4.4.5.2. Q-. Minor deviations from published procedures, which did not affect safety of flight. Control was somewhat rough or erratic. Hesitant in application of procedures or corrections.

4.4.5.3. U. Takeoff was potentially dangerous. Exceeded aircraft/systems limitations. Failed to establish proper climb attitude. Excessive deviation from intended flight path. Violated flight and/or performance manual procedures.

4.4.6. Area 34. Departure.

4.4.6.1. Q. Performed departure as published/directed and complied with all restrictions or controlling agency instructions. Made all required reports. Applied course/heading corrections promptly. Demonstrated smooth, positive aircraft control.

4.4.6.2. Q-. Minor deviations in navigation occurred during departure. Slow to comply with controlling agency instructions or unsure of reporting requirements. Slow to apply course/heading corrections. Aircraft control was not consistently smooth and positive.

4.4.6.3. U. Failed to comply with published/directed departure, or controlling agency instructions. Accepted an inaccurate clearance. Aircraft control was erratic.

4.4.7. Area 35. En Route Navigation/Use of Navigational Aids (NAVAIDS)

4.4.7.1. Q. Satisfactory capability to navigate using all available means. Used appropriate navigation procedures. Ensured NAVAIDS were properly tuned, identified, and monitored. Complied with clearance instructions. Aware of position at all times. Remained within the confines of assigned airspace.

4.4.7.2. Q-. Minor errors in procedures/use of navigation equipment. Some deviations in tuning, identifying, and monitoring NAVAIDS were observed. Slow to comply with clearance instructions. Had some difficulty in establishing exact position and course. Slow to adjust for deviations in time and course.

4.4.7.3. U. Major errors in procedures/use of navigation equipment. Did not ensure navigational aids (NAVAIDS) were tuned, identified and monitored. Could not establish position. Failed to recognize checkpoints or adjust for deviations in time and course. Did not remain within the confines of assigned airspace. Exceeded Q- criteria.

4.4.8. Area 36. Descent.

4.4.8.1. Q. Performed descent as directed. Complied with all restrictions. Properly set altimeters and tuned, identified, and monitored all NAVAIDS.

4.4.8.2. Q-. Performed descent as directed with minor deviations that did not compromise mission safety. Slow to comply with controller instructions, set proper altimeter setting. Delayed tuning, identifying, or monitoring proper NAVAIDS. Slow to make corrections.

4.4.8.3. U. Performed descent with major deviations. Failed to follow controller instructions. Failed to tune, identify, or monitor NAVAIDS or set altimeters properly. Erratic corrections were observed.

4.4.9. Area 37. Holding/Procedure Turn.

4.4.9.1. Q. Performed entry and holding in accordance with published procedures and directives. Tuned, identified, and monitored proper NAVAIDS. Holding pattern limits exceeded by not more than:

4.4.9.1.1. VOR Leg timing

+/- 15 seconds

4.4.9.1.2. TACAN +/-1 nautical mile
(NM)

4.4.9.2. Q-. Performed entry and holding procedures with minor deviations. Delayed tuning, identifying, or monitoring proper NAVAIDS. Holding pattern limit exceeded by not more than:

4.4.9.2.1. VOR Leg timing +/- 30 seconds

4.4.9.2.2. TACAN +/- 2 NM

4.4.9.3. U. Holding was not in accordance with technical orders, directives, or published procedures. Failed to tune, identify, or monitor NAVAIDS. Exceeded Q- holding pattern limits.

4.4.10. Area 38. Arrival Procedures (Instrument Flight Rules).

4.4.10.1. **Subarea 38a. Instrument Approach Procedure/Penetration (Initial Approach Fix to Final Approach Fix/Descent Point).** NOTE: Use area 37 criteria and the criteria below for procedure turn approaches.

4.4.10.1.1. Q. Performed the approach procedure/penetration as published/directed and IAW applicable directives. Tuned, identified, and monitored proper NAVAIDS at the appropriate time. Complied with all restrictions. Made smooth and timely corrections.

4.4.10.1.2. Q-. Performed the approach procedure/penetration with minor deviations. Delayed tuning, identifying, and monitoring proper NAVAIDS. Complied with all restrictions. Slow to make corrections.

4.4.10.1.3. U. Performed the approach procedure/penetration with major deviations. Failed to tune, identify, and monitor NAVAIDS, resulting in major deviations and/or unsafe conditions. Erratic corrections. Failed to comply with restrictions.

4.4.10.2. Subarea 38b. Instrument Pattern/Radar Vectors to Final.

4.4.10.2.1. Q. Performed procedures IAW applicable directives. Smooth and timely response to controller instructions.

4.4.10.2.2. Q-. Performed procedures with minor deviations. Slow to respond to controller instructions.

4.4.10.2.3. U. Performed procedures with major deviations/erratic corrections. Failed to comply with controller instructions.

4.4.11. Area 39. Non-Precision Approach.

4.4.11.1. Q. Approach was IAW published procedures. Used appropriate descent rate to arrive at minimum decision altitude (MDA) at or before visual descent point (VDP). Position permitted a safe landing.

4.4.11.1.1. Airspeed +10/-5 knots

4.4.11.1.2. Heading +/-5 degrees (ASR)

4.4.11.1.3. Course +/-5 degrees at MAP

4.4.11.1.4. Localizer deflection Less than one dot

4.4.11.1.5. MDA +100/-0 feet

4.4.11.2. Q-. Performed approach with minor deviations. Arrived at MDA at or before the MAP, but past the VDP. Initiated missed approach/go-around as directed or appropriate.

4.4.11.2.1. Airspeed +15/-5 knots

4.4.11.2.2. Heading +/-10 degrees (ASR)

4.4.11.2.3. Course +/-10 degrees at MAP

4.4.11.2.4. Localizer Within two dots deflection

4.4.11.2.5. MDA +150/-50 feet

4.4.11.3. U. Approach not IAW flight manual, directives or published procedures. Maintained steady-state flight below the MDA, even though the -50 foot limit was not exceeded. Could not land safely from approach and did not initiate missed approach/go-around when appropriate or directed. Exceeded Q- criteria.

4.4.12. Area 40. Circling/Side-Step Approach.

4.4.12.1. Q. Properly identified aircraft category for the approach and remained within the lateral limits for that category. Complied with controller's instructions. Attained runway alignment without excessive bank angles. Did not descend from the MDA until in a position to place the aircraft on a normal glide path or execute a normal landing.

4.4.12.1.1. Airspeed +10/-5 knots

4.4.12.1.2. Altitude +100/-0 feet

4.4.12.2. Q-. Slow to comply with controller's instructions. Attained runway alignment but occasionally required excessive bank angles or maneuvering.

4.4.12.2.1. Airspeed +15/-5 knots

4.4.12.2.2. Altitude +150/-50 feet

4.4.12.3. U. Did not properly identify aircraft category or exceeded the lateral limits of circling airspace. Did not comply with controller's instructions. Excessive maneuvering to attain runway alignment was potentially unsafe. Descended from the MDA before the aircraft was in position for a normal glide path or landing. Exceeded Q- criteria.

4.4.13. Area 41. Precision Approach.

4.4.13.1. Subarea 41a. Precision Approach Radar (PAR)

4.4.13.1.1. Q. Approach was IAW published procedures. Smooth and timely response to azimuth and glide slope or controller's instructions. Complied with decision height. Position would have permitted a safe landing. Maintained glide path with only minor deviations.

4.4.13.1.1.1. Airspeed +10/-5 knots

4.4.13.1.1.2. Heading Within 5 degrees of controller instructions.

4.4.13.1.2. Q-. Performed approach with minor deviations. Slow to make corrections or react to controller's instructions. Position permitted a safe landing. Improper glide path control. Initiated missed approach as directed or at decision height +50/-0 feet, if applicable.

4.4.13.1.2.1. Airspeed +15/-5 knots

4.4.13.1.2.2. Heading Within 10 degrees of controller's instructions.

4.4.13.1.3. U. Approach not IAW flight manual, directives or published procedures. Erratic course and glide slope corrections. Did not make corrections or react to controller's instructions. Did not comply with decision height and/or position would not have permitted a safe landing. Exceeded Q- limits.

4.4.13.2. Subarea 41b. Instrument Landing System (ILS) Approach.

4.4.13.2.1. Q. Performed procedures as published and IAW applicable directives. Smooth and timely corrections to azimuth and glide slope. Complied with decision height and position permitted a safe landing.

4.4.13.2.1.1. Airspeed +10/-5 KIAS

4.4.13.2.1.2. Glide slope/azimuth within one dot

4.4.13.2.2. Q-. Performed procedures with minor deviations. Slow to make corrections or initiate procedures. Position would have permitted a safe landing. Initiated missed approach at decision height +50/-0 feet, if applicable.

4.4.13.2.2.1. Airspeed +15/-5 KIAS

4.4.13.2.2.2. Glide slope within one-dot low/two dots high

4.4.13.2.2.3. Azimuth within two dots

4.4.13.2.3. U. Performed procedures with major deviations. Erratic course/glide slope corrections. Did not comply with decision height or position would not have permitted a safe landing. Exceeded Q- criteria.

4.4.14. Area 42. VFR Procedures/Patterns.

4.4.14.1. Q. Adhered to published restrictions/local guidance. Performed traffic pattern and turn to final/final approach IAW flight manual procedures. Aircraft control was smooth and positive. Did not over/under-shoot final approach. Constantly cleared area of intended flight.

4.4.14.1.1. Airspeed +10/-5 knots

4.4.14.1.2. Pattern Altitude +/- 100 feet

4.4.14.2. Q-. Minor deviations from published restrictions/local guidance. Performed traffic pattern and turn to final/final approach with minor deviations to procedures. Aircraft control was safe but not consistently smooth and positive. Over/under-shot final approach slightly but was able to intercept a normal glide path. Adequately cleared area of intended flight.

- 4.4.14.2.1. Airspeed +15/-5 knots
- 4.4.14.2.2. Pattern Altitude +/- 200 feet

4.4.14.3. U. Major/unsafe deviations from published restrictions/local guidance. Did not perform traffic pattern and turn to final/final approach IAW technical orders, directives or published procedures. Displayed erratic aircraft control. Over/under-shot final approach by a wide margin requiring a go-around or potentially unsafe maneuvering on final. Did not clear area of intended flight. Exceeded Q- criteria.

4.4.15. Area 43. Engine Out Approach--use approach criteria for the type of approach being flown and the following.

4.4.15.1. Q. Performed procedures IAW the flight manual and associated directives. Individual technique complied with established procedures. Proper control inputs were used to correct asymmetric condition. Aircraft was properly trimmed. Proper consideration was given to maneuvering with regard to the "dead" engine.

4.4.15.2. Q-. Minor deviations in procedures/aircraft control allowed the aircraft to occasionally be in uncoordinated flight. Unnecessary maneuvering due to minor errors in planning or judgment.

4.4.15.3. U. Major/unsafe deviations from procedures. Individual technique unsafe or in violation of established procedures. Aircraft was not properly trimmed. Aircraft control was erratic and consistently resulted in uncoordinated flight. Maneuvering with regard to the "dead" engine was potentially unsafe.

4.4.16. Area 44. 50 and 100 Percent Flap Landing.

4.4.17. Area 45. No Flap Landing.

4.4.18. Area 46. Engine-Out Landing.

4.4.19. Areas 44 through 46 **Note:** The following criteria is written to generally apply to all landings. Flight examiners must apply these criteria judiciously to allow for the unique characteristics of each type of landing. Where runway configuration, arresting cable placement, or flight manual limitations require an adjustment to the desired touchdown point, a simulated runway threshold will be identified and the grading criteria applied accordingly. For instrument approaches, the examinee should utilize a normal glide slope from either the decision height or from a point where visual acquisition of the runway environment is made.

4.4.19.1. Q. Performed landing as published/directed. Crossed threshold at threshold speed +/- 5 knots at proper attitude. Smooth and positive aircraft control throughout the roundout and flare. Touched down with no crab, and not more than 15 feet left or right of centerline. Complied with flight manual procedures for the use of brakes and reverse thrust. Met the following criteria:

- 4.4.19.1.1. Touchdown Speed +/-5 knots

- 4.4.19.1.2. Touchdown Point: 1000' – 2000' from the runway threshold

4.4.19.2. Q-. Performed landing with minor deviations to procedures as published/directed. Crossed threshold at threshold speed +10/-5 knots slightly high or

low but no compromise of safety. Touched down not more than 25 feet left or right of centerline. Exceeded Q criteria but not the following:

4.4.19.2.1. Touchdown speed +10/-5 knots

4.4.19.2.2. Touchdown point: 0' - 1000' or 2001' - 3000' from the runway threshold

4.4.19.3. U. Landing not performed as published/directed. Crossed threshold excessively high or low and more than +10/-5 knots. Touched down excessively crabbed and more than 25 feet left or right of centerline. Failed to comply with flight manual procedures for the use of brakes and reverse thrust. Exceeded Q- criteria.

4.4.20. Area 47. Touch and Go Landing (touchdown through lift-off).

4.4.20.1. Q. Performed procedures in a timely manner and IAW the flight manual and local directives. Smooth and positive control. Maintained runway centerline within 15 feet left or right throughout the touch and go.

4.4.20.2. Q-. Performed procedures with minor deviations. Aircraft control was safe but not consistently smooth and positive. Delayed accomplishment of required checklists. Consistently left or right of centerline but within 25 feet.

4.4.20.3. U. Major deviations to procedures. Displayed erratic/unsafe aircraft control. Excessively delayed and/or misapplied required checklists. Allowed aircraft to drift/remain more than 25 feet left or right of centerline.

4.4.21. Area 48. Missed Approach/Go-Around.

4.4.21.1. Q. Executed missed approach IAW published procedures and restrictions. Initiated and performed go-around promptly. Complied with controller's instructions. Applied smooth control inputs. Attained and maintained a positive climb.

4.4.21.2. Q-. Executed missed approach with minor deviations to published procedures/directives. Was slow or hesitant to initiate go-around. Slow to respond to controller's instructions. Slightly over-controlled the aircraft.

4.4.21.3. U. Did not execute missed approach IAW technical orders, directives or published procedures. Did not comply with controller's instructions. Deviations or misapplication of procedures could have led to an unsafe condition. Exceeded Q- criteria.

4.4.22. Area 49. Engine-Out Go-Around--use Area 43 criteria and the following.

4.4.22.1. Q. Applied smooth coordinated control inputs. Rudder and aileron inputs were in the correct direction. Maneuvering appropriate with regard to the "dead" engine. Individual technique complied with established procedures.

4.4.22.2. Q-. Rudder and aileron inputs were in correct direction but some over/under control. Individual techniques were safe, but detracted from the maneuver.

4.4.22.3. U. Rudder and/or aileron inputs were incorrect. Maneuvering with regard to the "dead" engine potentially unsafe. Failed to comply with/consider minimum control speeds. Individual technique unsafe or violated established procedures.

4.4.23. Area 50. After Landing/Engine Shutdown.

4.4.23.1. Q. Appropriate after-landing/engine shutdown checks and aircraft taxi procedures accomplished IAW published procedures.

4.4.23.2. Q-. Minor deviations or omissions were made to published procedures.

4.4.23.3. U. Appropriate after-landing/engine shutdown checks or aircraft taxi procedures were not IAW technical orders, directives or published procedures. Major deviations or omissions occurred which could have jeopardized safety.

4.4.24. Area 51. Air to Air Refueling (AAR) Procedures

4.4.24.1. Q. Rendezvous effectively accomplished using proper procedures. Demonstrated effective/appropriate use of radio communications for briefed emission control (EMCON) level. Expeditiously established and maintained proper position. Aircraft control was positive and smooth. Maintained the contact position for 10 minutes (at least 5 minutes continuous) with no more than one pilot-induced disconnect. For mission pilots, maintain the precontact position for at least two minutes.

4.4.24.2. Q-. Rendezvous delayed by improper techniques, procedures or radio communications. Slow to recognize and apply needed corrections to establish and maintain proper position. Aircraft control was not always positive and smooth, but adequate. Accomplished published/directed procedures with deviations or omissions that did not affect the successful completion of air refueling. Maintained the contact position for at least 10 minutes with no more than two pilot-induced disconnects.

4.4.24.3. U. Displayed lack of knowledge or familiarity with procedures to the extent that air refueling was or could have been jeopardized. Failed rendezvous as a result of improper procedures. Spent excessive time in trail. Aircraft control in the pre-contact/refueling position was erratic or unsafe. Made deviations or omissions that affected flight safety and/or the successful completion of the air refueling. Used unacceptable procedures. Performance caused more than two pilot-induced disconnects and/or delayed mission accomplishment. For mission pilots, unable to safely maintain the precontact position.

4.4.25. Area 52. Communication/Interrogator Friend or Foe/Secure Interrogator Friend (Comm/IFF/SIF).

4.4.25.1. Q. Complete knowledge of and compliance with correct Comm/IFF/SIF procedures. Transmissions were concise with proper terminology. Complied with and acknowledged all required instructions. Thoroughly familiar with all communications security requirements, HAVE QUICK and secure voice equipment. Correctly authenticated.

4.4.25.2. Q-. Occasional deviations from procedures that required retransmissions or resetting codes. Slow in initiating and/or missed several required radio calls. Transmissions contained extraneous matter, were not in proper sequence, or used non-standard terminology. Displayed limited knowledge of communication security requirements, HAVE QUICK and secure voice equipment. Required numerous attempts to complete authentication.

4.4.25.3. U. Incorrect procedures or poor performance caused confusion and jeopardized mission accomplishment. Omitted numerous required radio calls. Displayed inadequate

knowledge of communications security requirements, HAVE QUICK and secure voice equipment. Was unable to properly authenticate.

4.4.25.4. Area 53. Reverse Taxi.

4.4.25.4.1. Q. Complied with all directives concerning reverse taxi. Adequately briefed procedures and complied with loadmaster (LM) directions. Aircraft control/throttle technique was smooth and positive.

4.4.25.4.2. Q-. Minor deviations to reverse taxi procedures. Briefing hard to follow but no compromise of safety. Slow to respond to LM directions. Some over/under control.

4.4.25.4.3. U. Major deviations to procedures/directives. Failed to brief procedures and/or briefing created doubts or confusion. Failed to respond to LM directions. Aircraft control was unsafe or could have resulted in damage to the aircraft or property, or injury to personnel.

4.4.26. Area 54. Defensive Systems/Tactics.

4.4.26.1. Q. Demonstrated satisfactory knowledge of defensive systems and thorough knowledge of tactics applicable to the mission. Applied appropriate tactics to avoid the threat and minimize exposure. Made timely and appropriate inputs to crew during mission.

4.4.26.2. Q-. Limited knowledge of defensive systems. Minor errors in tactics selection. Was unfamiliar with the appropriate tactic for a given scenario. Did not make timely inputs to crew during mission.

4.4.26.3. U. Knowledge of defensive systems was unsatisfactory. Major errors in tactics selection would have resulted in an unsuccessful mission.

4.4.27. Area 55. Threat Analysis/Avoidance.

4.4.27.1. Q. Able to plot threats in-flight and formulate a plan of action to avoid lethal range of given threat system. Executed the proper evasive maneuver in a timely manner when given an immediate threat. Adequately analyzed and degraded all threats ensuring effective mission accomplishment. Aware of appropriate tactics to avoid threats and exposure.

4.4.27.2. Q-. Made minor errors in plotting and avoiding the lethal range of a given threat system. Slow to execute the proper evasive maneuver. Minor errors in threat analysis or tactics selection.

4.4.27.3. U. Was unable to plot a given threat. Did not avoid lethal range of given threat system. Did not execute an effective evasive maneuver when given an immediate threat. Failed to ensure mission effectiveness by not adequately analyzing or degrading threat(s). Not aware of appropriate tactics for specific threats or terrain.

4.4.28. Area 56. NVG Usage/Limitations.

4.4.28.1. Q. Correctly described the use/limitations of night vision goggles (NVGs). Properly preflighted, handled, and used NVGs during the flight.

4.4.28.2. Q-. Made minor omissions or deviations in describing the use/limitations of NVGs. Did not properly preflight, handle, or use NVGs during the flight, but caused no damage to equipment. Mission success not negatively affected.

4.4.28.3. U. Procedures for using NVGs were incorrect. Caused damage to equipment. Mission unsuccessful as a result of improper NVG usage.

4.4.29. Area 57. Airdrop Procedures.

4.4.29.1. Q. Correctly identified the drop zone (DZ) and made appropriate corrections to fine-tune the track. Track was IAW mission plan or as updated by crew. Aircraft configuration was correct.

4.4.29.1.1. Airspeed. +/- 5 knots.

4.4.29.1.2. Altitude + 50/- 0 feet.

4.4.29.2. Q-. Identified the DZ late despite clear marking and sufficient landmarks. Alignment was satisfactory but tended to angle. Minor errors in aircraft configuration but would not impede mission accomplishment.

4.4.29.2.1. Airspeed. + 10/- 5 knots.

4.4.29.2.2. Altitude. + 100/- 50 feet.

4.4.29.2.3. U. Was unable to identify DZ due to poor technique or pilot error. Did not fly proper alignment, or was unaware of alignment error. Mission not accomplished due to aircraft configuration, poor DZ acquisition, alignment, or deviation from procedures, caused by pilot error or omission. Did not recognize a no-drop situation. Exceeded Q- criteria.

4.4.30. Area 58. Slowdown. Use Area 35 criteria (as appropriate).

4.4.30.1. Q. Had thorough knowledge of slowdown procedures. Complied with all published/ briefed procedures.

4.4.30.2. Q-. Limited knowledge of slowdown procedures. Minor deviations did not affect mission accomplishment.

4.4.30.3. U. Had unsatisfactory knowledge of slowdown procedures. Major deviations adversely affected mission accomplishment.

4.4.31. Area 59. Escape. Use Area 35 criteria (as appropriate).

4.4.31.1. Q. Aircraft configuration was correct. In addition, the following parameters were not exceeded.

4.4.31.1.1. Airspeed. +/- 5 knots.

4.4.31.1.2. Altitude. + 50/- 0 feet.

4.4.31.2. Q-. Minor errors in aircraft configuration but would not impede mission accomplishment or safety. In addition, the following parameters were not exceeded.

4.4.31.2.1. Airspeed. + 10/- 5 knots.

4.4.31.2.2. Altitude. + 100/- 50 feet.

4.4.31.3. U. Aircraft configuration was not correct or Q- tolerances were exceeded.

4.4.32. **Area 60. Sea Rescue Kit Delivery.** Use Area 57 criteria (as appropriate).

4.4.32.1. Q. Correctly delivered Sea Rescue Kit, bracketing the survivor within 100 feet. Kit was delivered on the correct side (upwind or downwind). Displayed thorough knowledge of delivery method.

4.4.32.2. Q-. Airdrop within 300 feet of the survivor, properly bracketed on correct side (upwind or downwind). Difficulty flying the required procedure, but able to deliver kit safely.

4.4.32.3. U. Delivery not IAW flight manual, directives, or published procedures. Airdrop greater than 300 feet from the survivor. Kit delivered to incorrect side (upwind or downwind). Aircraft was flown in an erratic manner. Exceeded Q- criteria.

4.4.33. **Area 61. Parabundle Delivery.** Use area 57 criteria.

4.4.34. **Area 62. Freefall Delivery.** Use area 57 criteria.

4.4.35. **Area 63. Pararescue (PJ) Directed Airdrop.**

4.4.35.1. Q. Correctly followed briefed airdrop procedures. Flew stable platform, effectively coordinated airdrop with jumpmaster.

4.4.35.2. Q-. Minor deviations to published/briefed procedures, but able to complete airdrop safely. Erratic aircraft control caused problems with jumpmaster's directions.

4.4.35.3. U. Airdrop not IAW flight manual, directives, or published procedures. Unable to coordinate with jumpmaster to successfully accomplish the airdrop. Exceeded Q- criteria.

4.4.36. **Area 64. Helicopter Air to Air Refueling (HAAR).**

4.4.36.1. Q. Performed aerial rendezvous, join-up, and disconnect procedures as published/ directed. Maintained positive aircraft control throughout the refueling event. Responded quickly and accurately to situations requiring an emergency breakaway. Correctly performed emergency breakaway or verbally evaluated event to the satisfaction of the evaluator.

4.4.36.1.1. Airspeed. +/- 5 knots. No lower than minimum operating speed (MOS).

4.4.36.1.2. Heading/Course. +/- 10 degrees.

4.4.36.1.3. Altitude. +/- 100 feet.

4.4.36.2. Q-. Performed procedure with minor deviations. Slow to make aircraft attitude corrections. Aircraft control was not consistently smooth and positive. Emergency breakaway performed with minor discrepancies not affecting safety or verbally evaluated event with minor discrepancies noted.

4.4.36.2.1. Airspeed. + 10/- 5 knots. No lower than MOS.

4.4.36.2.2. Heading/Course. +/- 20 degrees.

4.4.36.2.3. Altitude. +/- 150 feet.

4.4.36.3. U. Refueling not performed IAW flight manual, directives, or published procedures. Made erratic corrections throughout the aerial refueling. Did not respond accurately to situation requiring emergency breakaway. Performed emergency breakaway with major discrepancies or verbally evaluated event with major errors noted. Exceeded Q- criteria.

4.4.37. **Area 65. NVG Airland.** NVG airland may be evaluated using normal or maximum effort procedures.

4.4.37.1. For non-assault NVG airland operations use areas for detailed criteria: Area 23 – Takeoff, Area 44 – 100/50 Percent Landing, Area 47 – Touch-and-Go Landing, and Area 48 – Missed Approach/Go-Around. If using assault procedures during NVG airland procedures, additionally use the Areas 67 through 69.

4.4.37.2. Q. Takeoff, landing, and missed approach criteria listed were not exceeded. Displayed satisfactory knowledge of NVG airland procedures. Thoroughly analyzed departure/landing runway and surrounding terrain.

4.4.37.3. Q-. Minor deviations in knowledge or published procedures. Errors did not affect safety or mission accomplishment.

4.4.37.4. U. Procedures not IAW flight manual, directives, or published procedures. Unable to analyze NVG airland constraints or verbalize concerns posed by terrain or other factors. Could not describe or apply above terms. Displayed unsatisfactory knowledge of NVG airland procedures. Major errors impacting safety and mission accomplishment.

4.4.38. **Area 66. Tactical Recovery.** SCAs, overhead/downwind approaches and random steep/shallow approaches are all considered tactical recoveries for the purpose of evaluations.

4.4.38.1. Q. Followed procedures as briefed and IAW flight manual, directives, or published procedures. Displayed smooth, positive control throughout the recovery. Aircraft was in position to intercept glide path for normal landing. Gave proper consideration to threat location and adjusted pattern accordingly. Constantly cleared area of intended flight.

4.4.38.2. Q-. Performed recovery with minor deviations to published procedures. Aircraft control was not consistently positive and smooth. Over/under-shot final approach slightly but was able to intercept glide path for normal landing.

4.4.38.3. U. Recovery not performed IAW flight manual, directives or published procedures. Displayed erratic aircraft control. Over/under-shot final approach, requiring a go-around or potentially unsafe maneuvering to intercept final. Failed to consider threat location or proximity and/or maneuvering could have placed the aircraft within lethal range of given threat system. Did not clear area of intended flight.

4.4.39. **Area 67. Max Effort Procedures.**

4.4.39.1. Q. Displayed satisfactory knowledge of assault procedures. Could describe and apply terms such as acceleration check speed, minimum field length for maximum effort take-off (MFLMETO), three-engine V_{mc}, etc. Thoroughly analyzed departure/landing runway and surrounding terrain. Reviewed all applicable TOLD and thoroughly briefed crew on their duties.

4.4.39.2. Q-. Minor deviations in knowledge or published procedures. Minor errors in describing or applying above terms. Minor errors or omissions in TOLD or crew briefing.

4.4.39.3. U. Procedures not IAW flight manual, directives, or published procedures. Unable to analyze assault zone constraints or verbalize concerns posed by terrain or other factors. Could not describe or apply above terms. Major errors in TOLD data review or crew briefing. Displayed unsatisfactory knowledge of assault procedures.

4.4.40. Area 68. Max Effort Takeoff.

4.4.40.1. Q. Maintained smooth positive control throughout departure roll and takeoff. Climbed on speed and decreased angle of attack once clear of obstacle.

4.4.40.2. Q-. Control inputs were abrupt. Minor deviations from published/briefed procedures did not jeopardize safety.

4.4.40.3. U. Takeoff was not IAW with flight manual, directives, or published procedures. Did not use V_{mc} when conditions permitted. Raised flaps too quickly with relation to airspeed. Performance of maneuver jeopardized safety.

4.4.41. Area 69. Max Effort Landing.

4.4.41.1. Q. Maintained smooth approach path. Used proper aim points with positive corrections, as necessary. Touched down on centerline within the zone (defined as the first 500 feet of usable runway) without excessive bouncing or crab. Maintained runway centerline during rollout.

4.4.41.1.1. Airspeed. +/- 5 knots.

4.4.41.2. Q-. Minor deviations to published procedures. Aim point wandered or corrections were not smooth or timely. Landed in zone but had excessive bouncing or crab. Touchdown was no more than 10 feet from centerline.

4.4.41.2.1. Airspeed. + 10/- 5 knots.

4.4.41.3. U. Touchdown short of the landing zone. Touchdown beyond the landing zone and did not execute a go-around. Exceeded Q- criteria.

4.4.42. Area 70. NVG Low Level

4.4.42.1. Q. Planned and flew a route to minimize risk to aircraft and crew for a given mission using NVG procedures IAW governing directives/procedures. Avoided excessive or numerous low altitude warnings. Appropriately assisted CSO with TOT/TOA control. Maintained airspeed commensurate with CSO inputs. Flew appropriate profile for terrain and environmental conditions.

4.4.42.2. Q-. Had numerous low altitude warnings but no significant compromise to safety. Minor deviations from published directives/procedures and airspeed profile.

4.4.42.3. U. Had excessive amount and/or excessively low altitude warnings. Major deviations from established directives and procedures which jeopardized safety or mission effectiveness.

4.4.43. Area 71. Automation Management.

4.4.43.1. Q. Established/followed guidelines for the operation of automated systems; aware of when systems should be disabled, and when programming actions must be verbalized and acknowledged. Established/followed Pilot Flying (PF) and Pilot Monitoring (PM) responsibilities with regard to automated systems. Periodically reviewed and verified the status of aircraft automated systems. Verbalized and acknowledged entries and changes to automated systems parameters. Allowed sufficient time for programming the Mission Computer. Used automated systems at appropriate levels to reduce workload, but reduced or disengaged level of automation when programming demands could have reduced situational awareness or created work overloads.

4.4.43.2. Q-. Had limited knowledge of guidelines for the operation of automated systems; unclear as to when systems should be disabled, or when programming actions must be verbalized and acknowledged. Slow to establish/follow Pilot Flying (PF) and Pilot Monitoring (PM) responsibilities with regard to automated systems. Slow to review and verify the status of aircraft automated systems. Inconsistently verbalized and acknowledged entries and changes to automated systems parameters. Did not always allow sufficient time for programming the Mission Computer. Inconsistently used automated systems at appropriate levels.

4.4.43.3. U. Did not establish/follow guidelines for the operation of automated systems; unaware of when systems should be disabled, or programming actions that must be verbalized and acknowledged. Did not establish/follow Pilot Flying (PF) and Pilot Monitoring (PM) responsibilities with regard to automated systems. Did not periodically review and verify the status of aircraft automated systems. Did not verbalize and acknowledge entries and changes to automated systems parameters. Failed to allow sufficient time for programming the Mission Computer. Did not use automated systems at appropriate levels, to decrease workload. Did not reduce or disengage level of automation when programming demands reduced situational awareness or created work overloads.

4.4.44. **Area 72. Cat 2 ILS.** Use sub area 41b and area 71 for grading criteria.

4.4.45. **Area 73. Time Control.**

4.4.45.1. Q. Accurately used all available data to arrive at the objective on time. Recomputed TOT/TOA in-flight as necessary.

4.4.45.2. Q-. Arrived at the objective on time but used excessive timing maneuvers or airspeed changes. Minor deviations in computing TOT/TOA in-flight as necessary.

4.4.45.3. U. Exceeded Q- TOT/TOA for HAAR/SCA/AAR. Could not accurately establish new TOT/TOA while airborne, when required.

4.4.46. **Area 74. Takeoff and Landing Data (TOLD).**

4.4.46.1. Q. Correctly computed the TOLD data using applicable performance data and corrections for existing field conditions. Was fully knowledgeable of takeoff and landing performance data.

4.4.46.2. Q-. Minor errors in the use of applicable performance charts, computing the performance data, or correcting for existing field conditions resulting in data exceeding Q

criteria. Incorrectly transcribed Mini TOLD data. Had some knowledge of takeoff and landing performance data. Would not have compromised safety of flight.

4.4.46.3. U. Failed to compute TOLD data, omitted necessary corrections for existing field conditions, or errors in computing performance data resulted in airspeeds and/or distances exceeding Q-criteria. Limited knowledge of takeoff and landing performance data. Did or could have compromised safety of flight.

4.4.47. Area 75. Fuel Planning.

4.4.47.1. Q. Demonstrated satisfactory knowledge of the type and use of data contained in fuel planning instructions. "En route fuel" computation errors did not exceed 3%. Correctly computed and performed fuel management procedures. Correctly computed an Equal Time Point (ETP), when required. Correctly constructed a range control chart (optional at the discretion of the evaluator). Manual fuel planning procedures were demonstrated at the discretion of the evaluator.

4.4.47.2. Q-. Displayed limited knowledge of fuel planning instructions. "En route fuel" computation errors did not exceed 5%. Fuel management procedures and/or ETP computed with minor mathematical errors or omissions that would not adversely affect mission accomplishment. If constructed, the range control chart had minor errors or omissions.

4.4.47.3. U. Displayed inadequate knowledge of fuel planning instructions. Fuel computations and/or ETP were not completed or contained major errors or omissions. If constructed, range control chart had major errors and omissions. Exceeded Q- criteria.

4.4.48. Areas 76-100. Reserved for future use.

Chapter 5

COMBAT SYSTEM OPERATOR EVALUATIONS

5.1. General. The criteria contained here and in [Chapter 3](#) apply to all CSO flight evaluations.

5.2. Objective. The examinee must satisfactorily demonstrate the ability to perform all CSO duties safely and effectively, including the operation of appropriate aircraft systems, IAW applicable flight manuals, and directives.

5.3. Requirements.

5.3.1. Qualification/Mission Evaluations. See [Table 2.4](#) for required evaluation areas. The HAAR rendezvous can be to an actual helicopter aircraft or another C-130 flying HAAR airspeed. Annotate on the AF Form 8 the type of drop conducted, drop score, TOT/TOA, type of low level (LL) flown and if it was conducted in mountainous terrain. Upon successful completion of the qualification/mission evaluation, award the crew position of MN on their Form 8.

5.3.1.1. Initial/Requalification Qualification/Mission. Required in-flight evaluation profile will include at least 30 minutes of NVG low level to a time on target/arrival (TOT/TOA) event. A tactical event is considered to be HAAR, airdrop or SCA/IPRA. Though only one TOT/TOA is required, all three events must be observed. Mountainous low level is required on all initial evaluations and requalification evaluations where the crewmember was unqualified for greater than six months. Evaluators will determine threats for the mission evaluation profile. A minimum of one pre-briefed threat will be placed on the low-level route. Additionally, at least one non-preplanned threat will be given in flight.

5.3.1.2. Periodic Qualification/Mission. Required in-flight evaluation profile is the same as initial/requalification evaluations noted above. **Exception:** Only two tactical events are required, all three are preferable. The third event, if not observed in flight, will be evaluated through an alternate method. Do not miss the same tactical event on consecutive evaluations (e.g. if SCAs were verbally evaluated on the examinees last evaluation, then an SCA must be demonstrated in flight on the next evaluation). NVG low level in mountainous terrain must be conducted at least every other evaluation. Specific areas identified as basic qualification events ([Table 2.4](#)) will be demonstrated to the satisfaction of the evaluator during a ground evaluation or in-flight.

5.3.1.3. Simulator Evaluations. CSOs may accomplish periodic qualification evaluations in a certified HC-130J WST.

5.3.2. Special Qualification Evaluations. Currently, there are no special qualifications.

5.4. Grading Criteria.

5.4.1. Areas 1 through 20 --use general grading criteria in [Chapter 3](#) of this volume.

5.4.2. Areas 21 through 30 --use instructor evaluation grading criteria in [Chapter 3](#) of this volume (if applicable).

5.4.3. Area 101. Flight Plan/Airdrop Data/Charts.

5.4.3.1. Q. Completed a flight plan in its entirety with time errors not exceeding 3 minutes of total time to destination, or satisfactorily demonstrated manual flight planning procedures at the discretion of the evaluator. Calculated air release point (CARP) data completed in entirety with negligible errors. Selected current navigation charts of a proper scale and type of the sortie profile. Charts were constructed IAW current directives. Plotting errors did not exceed 3 NM. Demonstrated proper manual flight planning procedures, if required.

5.4.3.2. Q-. Minor errors or omissions that would not have adversely affected mission accomplishment. Time errors did not exceed 5 minutes. Plotting errors did not exceed 5 NM.

5.4.3.3. U. Flight plan was not completed. Could not demonstrate manual procedures, or failed to review computer flight plan. CSO flight plan and CARP data contained major errors/omissions. Selected an improper or obsolete chart. Exceeded Q- criteria.

5.4.4. Area 102. Fuel Planning.

5.4.4.1. Q. Demonstrated satisfactory knowledge of the type and use of data contained in fuel planning instructions. "En route fuel" computation errors did not exceed 3%. Correctly computed and performed fuel management procedures. Correctly computed an Equal Time Point (ETP), when required. Correctly constructed a range control chart (optional at the discretion of the evaluator). Manual fuel planning procedures were demonstrated at the discretion of the evaluator.

5.4.4.2. Q-. Displayed limited knowledge of fuel planning instructions. "En route fuel" computation errors did not exceed 5%. Fuel management procedures and/or ETP computed with minor mathematical errors or omissions that would not adversely affect mission accomplishment. If constructed, the range control chart had minor errors or omissions.

5.4.4.3. U. Displayed inadequate knowledge of fuel planning instructions. Fuel computations and/or ETP were not completed or contained major errors or omissions. If constructed, range control chart had major errors and omissions. Exceeded Q- criteria.

5.4.5. Area 103. Departure.

5.4.5.1. Q. Monitored headings, airspeeds, altitudes and aircraft position throughout departure. Used an instrument departure procedure and/or appropriate scale departure area chart. Provided headings, estimated time of arrival (ETA), and other required information in a timely manner. Monitored appropriate radios and clearances to ensure crew compliance. Provided updated information when the clearance caused a change in the planned departure. Ensured terrain clearance during departure by use of all available aids and the area chart.

5.4.5.2. Q-. Monitored aircraft position, but slow to provide headings, ETA, or other required information. Performance did not degrade mission accomplishment or compromise flight safety.

5.4.5.3. U. Did not monitor departure headings, airspeeds or altitudes. Unaware of aircraft position and unable to provide updated information when required. Did not use an instrument departure procedure and/or an appropriate scale departure area chart. Allowed

major deviations that degraded mission accomplishment or compromised safety. Did not ensure terrain clearance during the departure. No area chart available.

5.4.6. Area 104. Navigation Procedures.

5.4.6.1. Q. Certain of exact aircraft position. Remained within 3nm of course centerline or planned deviation (**Exception:** Threat avoidance, weather deviation, air traffic control (ATC) assigned heading, time control, etc.). Thorough knowledge of en route time status in relation to objective area. Complied with all altitude restrictions. Adhered to all airspace restrictions.

5.4.6.2. Q-. Uncertain of exact aircraft position due to marginal navigational procedures. Flew 3 to 5 NM from course without the above exceptions. Better awareness of required timing events or en route time status could have avoided excessive, unplanned maneuvering.

5.4.6.3. U. Exceeded 5 NM during en route navigation without the above exceptions. Was unable to maintain position awareness throughout most of the route. Unable to accurately assess required timing or unaware of mission time status, jeopardizing mission accomplishment. Violated airspace restrictions. Poor airspeed control resulted in numerous or extreme airspeed adjustment. Descended below minimum altitude restrictions.

5.4.7. Area 105. Radio Navigation.

5.4.7.1. Q. Thorough knowledge and effective operation of all RADAR/Digital Map/Common Cursor functions.

5.4.7.2. Q-. Limited knowledge and operation of all RADAR/Digital Map/Common Cursor functions causing minor distractions to mission effectiveness.

5.4.7.3. U. Knowledge and operation of all RADAR/Digital Map/Common Cursor functions was unsatisfactory and impeded mission effectiveness.

5.4.8. Area 106. Fuel Management/Range Control.

5.4.8.1. Q. Maintained fuel management control IAW directives. Kept pilot advised of fuel status.

5.4.8.2. Q-. Adequate fuel management/range control with minor computation errors noted. Did not adequately update the pilot on fuel status.

5.4.8.3. U. Failed to demonstrate an understanding of fuel management/range control procedures. Fuel computations not accomplished or contained significant errors. Failed to inform pilot of fuel status.

5.4.9. Area 107. Descent/Approach/Landing.

5.4.9.1. Q. Monitored aircraft position, approach instructions and primary approach navigation aids. Furnished headings, ETAs and other information to the pilot as required. Thoroughly understood approach and missed approach procedures. Ensured terrain clearance during approach by use of all available aids and area chart.

5.4.9.2. Q-. Monitored aircraft position but did not fully understand approach instructions/procedures. Slow to provide headings, ETAs or other appropriate information.

5.4.9.3. U. Failed to monitor aircraft position. Did not ensure terrain clearance during the approach. Did not use appropriate chart.

5.4.10. Area 108. Communication Procedures/Radio Transmission Usage and Discipline.

5.4.10.1. Q. Complete knowledge of and compliance with communications procedures. Radio communications (both inter- and intra-cockpit) were concise, accurate, and effectively used to direct actions by the crew to update appropriate agencies of the tactical situation.

5.4.10.2. Q-. Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, threat warning, or mission accomplishment. Extraneous comments over primary and secondary radios presented minor distractions.

5.4.10.3. U. Unsatisfactory knowledge of or failure to comply with communications procedures. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from situational awareness, threat warning, or mission accomplishment.

5.4.11. Area 109. Self Contained Approach (SCA) Procedures.

5.4.11.1. Q. Complied with all published procedures. Successfully directed the aircraft to SCA minimums so that a safe landing could be made. Used proper terminology; instructions were clear and concise during the entire approach. Time on target (TOT) +/- 60 seconds.

5.4.11.2. Q-. Briefing was incomplete or deviated from established procedures. Required excessive course corrections on final approach, but directed the aircraft to a point where a safe landing could be made. TOT +/- 60 seconds.

5.4.11.3. U. Had unsatisfactory knowledge of SCA procedures. Unable to direct the aircraft to a point from which a safe landing could be made. TOT exceeds Q- criteria.

5.4.12. Area 110. Defensive Systems/Tactics.

5.4.12.1. Q. Had thorough knowledge of necessary defensive systems/tactics applicable to the mission. Applied appropriate tactics to avoid the threat and minimize exposure. Made timely and appropriate inputs to crew during mission.

5.4.12.2. Q-. Limited knowledge of defensive systems. Minor errors in tactics selection. Was unfamiliar with the appropriate tactic for a given scenario. Did not make timely inputs to crew during mission.

5.4.12.3. U. Knowledge of defensive systems was unsatisfactory. Major errors tactics selection would have resulted in an unsuccessful mission.

5.4.13. Area 111. Threat Analysis/Avoidance.

5.4.13.1. Q. Able to plot threats in flight, and formulate a plan of action to avoid a given threat. Executed the proper evasive maneuver when given an immediate threat.

Adequately analyzed and degraded all threats ensuring effective mission accomplishment. Aware of appropriate tactics to avoid threats and exposure.

5.4.13.2. Q-. Made minor errors in plotting and avoiding a given threat. Minor errors in threat analysis or tactics selection.

5.4.13.3. U. Was unable to plot and avoid a given threat. Failed to ensure mission effectiveness by not adequately analyzing or degrading threat(s). Did not execute an effective evasive maneuver when given an immediate threat. Not aware of appropriate tactics for specific threats or terrain.

5.4.14. Area 112. Air to Air Refueling (AAR) Procedures (receiver).

5.4.14.1. Q. Effectively accomplished rendezvous and air refueling procedures. Planned optimum use of all available rendezvous aids. Thorough and complete knowledge of in flight air refueling procedures. Arrived at the coordinated air refueling point within 2 minutes of planned control time. Properly calculated bingo fuel to the planned abort base.

5.4.14.2. Q-. Overlooked use of some rendezvous aids, resulting in a delayed or inefficient rendezvous. Knowledge was sufficient to accomplish rendezvous and air refueling. Arrived at the coordinated air refueling point within 5 minutes of planned control time. Made minor miscalculations of bingo fuel to the planned abort base.

5.4.14.3. U. Displayed lack of knowledge or familiarity with the checklist, equipment, and procedures. Limited use of rendezvous aids adversely affected the rendezvous. Arrived at the coordinated air refueling point in excess of 5 minutes from planned control time. Selected an inappropriate abort base or failed to calculate a bingo fuel to safely arrive at an abort base with required fuel reserves. Failed to position the aircraft within the boundaries of the designated air-refueling track.

5.4.15. Area 113. Helicopter Air to Air Refueling (HAAR) Procedures.

5.4.15.1. Q. Effectively accomplished rendezvous and air refueling procedures. Used available navigation systems to acquire, identify, and accurately locate the air-refueling receiver. Provided timely and accurate advisories to direct aircraft to 1 NM range. Made distance advisories to the pilot to 1nm range and confirmed visual contact. Continued to provide advisories as needed. Performed timely and accurate No Visual Contact or Contact Lost procedure (as required). Arrived at the ARCP on time to 1 minute late.

5.4.15.2. Q-. Made limited use of navigational systems and experienced difficulty acquiring, identifying, and accurately locating the receiver. Provided limited advisories, but was able to accomplish the rendezvous to 1 NM. Provided limited advisories when needed and was frequently prompted by other crewmembers. Arrived at the ARCP greater than 1 minute to 2 minutes late.

5.4.15.3. U. Failed to use available navigation systems to acquire, identify, and accurately locate the receiver by 1 NM. Failed to direct the aircraft to a successful rendezvous. Failed to execute the correct No Visual Contact or Contact Lost procedure in a timely manner (as required). Arrived to ARCP greater than 2 minutes late.

5.4.16. Area 114. Airdrop Procedures. Applied proper procedures and correctly entered information into the computer. Was within 200 yards of CARP centerline or formation position at green light.

5.4.16.1. Q. Applied proper procedures and correctly entered information into the computer. Was within 200 yards of PI. TOA was +/- 60 seconds

5.4.16.2. Q-. Slow to apply proper procedures or entered in incorrect information into the computer, but did not adversely affect the airdrop. Within 300 yards of CARP centerline or formation position at green light. No drop due to crew error, but was called by the crew. TOA +/- 90 seconds.

5.4.16.3. U. Exceed Q- criteria.

5.4.17. Area 115. Night Vision Goggle (NVG) Usage/Limitations.

5.4.17.1. Q. Correctly described the use/limitations of night vision goggles (NVGs). Proper preflight, handling, and usage of NVGs during the flight.

5.4.17.2. Q-. Made minor omissions or deviations in describing the use/limitations of NVGs. Did not properly preflight, handle, or use NVGs during the flight, but caused no damage to equipment. Mission success not negatively affected.

5.4.17.3. U. Procedures for using NVGs were incorrect. Caused damage to equipment. Mission unsuccessful as a result of improper NVG usage. Could not identify a pair of NVGs.

5.4.18. Area 116. Search Data Computations.

5.4.18.1. Q. Checked all factors pertaining to search mission, such as weather and sea conditions, objective size, search time, and aircraft endurance. Selected an appropriate search pattern and accurately computed information such as track spacing, search altitude, and search speed.

5.4.18.2. Q-. Only the minimum information necessary to conduct the search was checked.

5.4.18.3. U. Inadequate knowledge of mission data; failed to check factors applicable to flight. Computations contained major errors or omissions. Poor planning degraded mission accomplishment or compromised safety.

5.4.19. Area 117. Search Pattern.

5.4.19.1. Q. Thorough understanding of search patterns. Monitored aircraft position throughout the pattern and allowed only minor deviations from centerline. Able to break out of search pattern for a possible sighting and reenter at original location to resume pattern.

5.4.19.2. Q-. Only the minimum information necessary to conduct the search was checked.

5.4.19.3. U. Inadequate knowledge of search patterns. Unsure of aircraft position during search pattern. Major deviations from course compromised mission accomplishment. Unable to breakout and reenter pattern.

5.4.20. Area 118, Time Control

5.4.20.1. Q. Accurately used all available data to arrive at the objective on time. Recomputed TOT/TOA in-flight as necessary.

5.4.20.2. Q-. Arrived at the objective on time but used excessive timing maneuvers or airspeed changes. Minor deviations in computing TOT/TOA in-flight as necessary.

5.4.20.3. U. Exceeded Q- TOT/TOA for HAAR/SCA/AAR. Could not accurately establish new TOT/TOA while airborne, when required.

5.4.21. Area 119. MTS-A Operations.

5.4.21.1. Q. Exhibits knowledge of safe equipment operation to include ground use, sensor modes, and lasers. Demonstrates proper procedure in selecting sensor modes and searching for ground objects. Knowledge and use of system enhances mission effectiveness.

5.4.21.2. Q-. Knowledge of system is lacking, but does not detract from mission accomplishment. Some deviation in proper sensor mode selection, stabilization, or cursor targeting.

5.4.21.3. U. Little or no knowledge of system or operation procedures. Exhibits unsafe operation of systems (not clearing turret prior to power application on ground, arming laser or manipulating weight on wheels (WOW) override at inappropriate time, focusing sensor at bright light sources). Lack of knowledge or operational ability detracts from mission accomplishment.

5.4.22. Area 120. Secure Voice, HAVE QUICK, SATCOM.

5.4.22.1. Q. Knowledgeable on the proper loading and operation procedures for secure communication equipment on aircraft. Able to demonstrate proper HAVE QUICK loading procedure. Utilizes SATCOM when appropriate.

5.4.22.2. Q-. Difficulty using or operating secure voice, SATCOM, or HAVE QUICK. Limited system knowledge.

5.4.22.3. U. Unable to operate secure voice, SATCOM, or HAVE QUICK equipment due to a lack of knowledge or skill. Operator inability has a negative impact on overall mission.

5.4.23. Area 121. Authentication, Encode/Decode.

5.4.23.1. Q. Understands and can demonstrate proper use of authenticators and encode/decode products.

5.4.23.2. Q-. Marginally effective use of authenticators and encode/decode products. Can demonstrate skill, but does not understand real-world application.

5.4.23.3. U. Ineffective use of authentication and encode/decode procedures. Does not meet Q- criteria.

5.4.24. Area 122. Forward Area Refueling Point (FARP).

5.4.24.1. Q. Effectively manages fuel panel and performs Panel Operator (PO) duties during FARP operations. If FARP is not performed during check ride, can speak to the duties required during FARP operations and shows proficiency through the use of checklists and the fuel panel.

5.4.24.2. Q-. Performs to Q level with the exception of minor errors or minimal Hot Refueling Supervisor (HRS) prompting. Able to operate fuel panel, but does not understand overall FARP procedure.

5.4.24.3. U. Unable to perform FARP duties, or lack of knowledge/skill results in mission failure.

5.4.25. Areas 123 - 150. Reserved for future use.

Chapter 6

LOADMASTER EVALUATIONS

6.1. General. The criteria contained in this chapter and **Chapter 3** applies to all loadmaster evaluations. Chapters 1 and 2 also apply to loadmaster evaluations. Mission qualified loadmasters require a combined qualification and mission evaluation (QUAL/MSN). Instructors will demonstrate instructor duties on all periodic evaluations.

6.2. Objective. The examinee must satisfactorily demonstrate the ability to perform all loadmaster duties safely and effectively, including the operation of appropriate aircraft systems IAW with applicable technical orders, instructions, and directives.

6.3. Requirements. See **Tables 2.1, 2.2 (instructor), and 2.5** for required evaluation areas. Upon successful completion of the qualification/mission evaluation, award the crew position of ML on their AF Form 8.

6.3.1. Initial/Requalification QUAL/MSN. The examinee will accomplish an aircraft preflight (evaluator discretion as to how much), completion of applicable weight and balance forms, a minimum of 30 minutes of NVG low level with the examinee scanning, an NVG helicopter air to air refueling (with a contact), an NVG airdrop, and an aircraft post-flight. The low level should be flown to either the airdrop or helicopter air to air refueling. The airdrop will be a Container Ramp Load (CRL), static line personnel, or Container Delivery System (CDS). Examinee will demonstrate knowledge of emergency procedures associated with each method of deployment. The evaluator will enter a detailed mission description on the AF Form 8.

6.3.2. Periodic QUAL/MSN. All evaluations should be scheduled with the minimum of NVG HAAR and at least one type of night airdrop (CRL, CDS, or static line personnel). The examinee will accomplish the applicable aircraft preflight (evaluator discretion as to how much) and aircraft weight and balance computations. A minimum of 30 minutes of NVG low level will be flown with the examinee scanning and a threat should be called while in-flight. At the minimum, one of the following events will be accomplished: NVG HAAR (with a contact), night airdrop (CRL, CDS, or Static line personnel only), or infil/exfil (tactical car/truck/humvee only; land, load/offload, takeoff). Any other events performed for the mission (FARP, hot gas, rescue drops, High Altitude Low Opening (HALO), etc.) will be evaluated; any events not performed will be verbally evaluated. The evaluator will enter a detailed mission description on the AF Form 8.

6.4. Grading Criteria.

6.4.1. Areas 1 through 18. Use general grading criteria in **Chapter 3** of this volume.

6.4.2. Areas 21 through 25. Use instructor evaluation grading criteria in Chapter 3 of this volume (if applicable).

6.4.3. Area 201. Aircrew Flight Equipment.

6.4.3.1. Q. Located, inspected, distributed and/or demonstrated the proper use of life support or emergency equipment. Knowledge of equipment was satisfactory.

6.4.3.2. Q-. Difficulty locating, inspecting, and/or demonstrating the proper use of life support or emergency equipment. Knowledge of equipment was adequate, but needs improvement.

6.4.3.3. U. Failed to inspect, distribute and/or demonstrate the proper use of life support or emergency equipment. Knowledge of equipment was unsatisfactory.

6.4.4. Area 202. Aircraft Configuration.

6.4.4.1. Q. Ensured the aircraft was properly configured to accommodate mission requirements. Familiar with various configurations as outlined in applicable directives and properly stowed configuration items that were not used.

6.4.4.2. Q-. Difficulty configuring the aircraft but did not impede mission. Limited knowledge of various configurations as outlined in applicable directives.

6.4.4.3. U. Failed to ensure proper aircraft configuration or caused mission delays. Had unsatisfactory knowledge of configurations. Failed to properly stow configuration items.

6.4.5. Area 203. Load Planning/Inspection.

6.4.5.1. Q. Accurately planned cargo and/or passenger loads and met aircraft center of gravity (CG) limits. Inspected cargo for proper preparation and documentation

6.4.5.2. Q-. Had some difficulty planning a load of cargo and/or passengers to meet CG limits. Did not accurately inspect cargo for proper preparation and documentation.

6.4.5.3. U. Unable to plan a load of cargo and/or passengers and meet CG limits. Failed to inspect cargo for proper preparation and documentation.

6.4.6. Area 204. On/Off Loading Procedures.

6.4.6.1. Q. Correctly onloaded/offloaded cargo/passengers in a safe and timely manner. Cargo entered into Multifunction Control Display (MFCD)/Communication/Navigation/Identification-Management Unit (CNI-MU) with less than 10 inches variance from actual load placement.

6.4.6.2. Q-. Had difficulty correctly onloading/offloading cargo/passengers in the aircraft. Cargo loaded in MFCD/CNI-MU 10-20 inches from actual load placement

6.4.6.3. U. Failed to correctly or safely onload/offload cargo/passengers in the aircraft. Loading procedures caused undue delay. Cargo loaded in MFCD/CNI-MU more than 20 inches from actual load placement. Heavy Equipment and Combat offload platforms not programmed in the MFCD exactly as they are in loaded in the aircraft

6.4.7. Area 205. Supervisory Abilities.

6.4.7.1. Q. Established and maintained control of personnel during loading operations. Safety was not compromised.

6.4.7.2. Q-. Established and maintained control of personnel, but made minor supervisory errors. Safety was not compromised.

6.4.7.3. U. Did not establish or maintain control of personnel and/or safety was compromised.

6.4.8. Area 206. Tie Down/Restraint.

6.4.8.1. Q. Correctly calculated and applied correct amount of restraint to a given item. Understood and could state the principals of restraint.

6.4.8.2. Q-. Difficulty calculating or applying the correct amount of restraint. Did not fully understand the principals of restraint.

6.4.8.3. U. Failed to correctly calculate or apply the correct amount of restraint. Did not understand and could not state the principals of restraint.

6.4.9. Area 207. Winching Procedures.

6.4.9.1. Q. Correctly demonstrated and/or explained winching procedures.

6.4.9.2. Q-. Difficulty demonstrating and/or did not completely explain correct winching procedures. Safety was not compromised.

6.4.9.3. U. Failed to demonstrate and/or did not explain correct winching procedures. Safety was compromised.

6.4.10. Area 208. Hazardous Material.

6.4.10.1. Q. Understood hazardous cargo procedures. Could comply with the provisions of AFMAN 24-204(I), *Preparing Hazardous Materials for Military Air Shipments* and/or follow the procedures for air movement of hazardous cargo under tactical, contingency or emergency conditions.

6.4.10.2. Q-. Understood hazardous cargo procedures, but made minor deviations stating them. Could comply with the provisions of AFMAN 24-204(I), and/or follow the procedures for air movement of hazardous cargo under tactical, contingency or emergency conditions.

6.4.10.3. U. Did not understand hazardous cargo procedures in AFMAN 24-204(I).

6.4.11. Area 209. Aircraft Limitations.

6.4.11.1. Dash 9 Loading Limits, Pallet/cargo Limits, and Loading Aids. **Note:** Limitations may include, but are not limited to cargo floor; roller; station; compartment; pallet weight, height and nets; loading aids.

6.4.11.2. Q. Correctly stated, understood, and could apply the correct limitations associated with the aircraft, on/off loading, and associated equipment.

6.4.11.3. Q-. Had difficulty stating various limitations. Had difficulty locating correct limitations in the loading manual.

6.4.11.4. U. Failed to state various limitations, or could not locate correct limitations in the loading manual.

6.4.12. Area 210. Passenger Handling.

6.4.12.1. Q. Correctly briefed and/or performed passenger handling procedures.

6.4.12.2. Q-. Had difficulty briefing and/or performing passenger handling procedures.

6.4.12.3. U. Failed to brief and/or did not perform proper passenger handling procedures.

6.4.13. Area 211. Border Clearance.

6.4.13.1. Q. Correctly followed command guidelines. Completed/explained border clearance requirements IAW current directives.

6.4.13.2. Q-. Difficulty explaining border clearance requirements. Minor mistakes degraded effectiveness.

6.4.13.3. U. Could not accurately complete forms. Unaware of command guidance, or could not explain requirements.

6.4.14. Area 212. Weight and Balance.

6.4.14.1. Q. Correctly entered weight and balance data into the CNI-MU. Manually completed DD Form 365-4 with only minor mistakes. Errors in takeoff or landing gross weights did not exceed +/- 500 pounds. Percent of Mean Aerodynamic Chord (MAC) was within +/- 0.5 percent. Did not exceed aircraft gross weight takeoff limits. Did not exceed CG limitations for takeoff or landing.

6.4.14.2. Q-. Entered weight and balance data into the CNI-MU with minor errors. Manually completed DD Form 365-4 with errors in takeoff or landing gross weights by +/-501 to 1,000 pounds or percent of MAC limitations by +/-0.6 to 1.0 percent. Did not exceed aircraft gross weight takeoff limits. Did not exceed CG limitations for takeoff or landing.

6.4.14.3. U. Incorrectly entered weight and balance data into the CNI-MU. Manually completed DD Form 365-4 with errors in takeoff or landing gross weights by +/-1,000 pounds or percent of MAC limitations by +/-1.0 percent. Exceeded aircraft gross takeoff weight/CG limits.

6.4.15. Area 213. Scanner Duties.

6.4.15.1. Q. Periodically performed scanner duties by monitoring aircraft interior and exterior for abnormal conditions.

6.4.15.2. Q-. Did not scan in a timely manner to recognize abnormal conditions.

6.4.15.3. U. Failed to perform scanner duties by monitoring or making periodic checks of the aircraft interior and exterior for abnormal conditions.

6.4.16. Area 214. Air to Air Refueling (AAR) System/Procedures.

6.4.16.1. Q. Knowledge of aerial refueling procedures was satisfactory. Adequate knowledge of air refueling system components and locations. Accomplished all air refueling procedures without error, including leak checks during contact, IAW with approved checklist and directives. Properly configured the aircraft prior to completion of the preparation for contact checklist.

6.4.16.2. Q-. Limited knowledge of aerial refueling procedures. Limited knowledge of air refueling system components and locations. Accomplished air-refueling procedures with minor errors, omissions, or deviations. Performed limited checks during contact. Performed aircraft configuration with minor errors or omissions that did not affect successful mission accomplishment.

6.4.16.3. U. Had inadequate knowledge of aerial refueling procedures. Inadequate knowledge of air refueling system components and/or locations. Accomplished air-

refueling procedures with major errors, omissions, or deviations critical to safety of flight. Failed to properly configure aircraft before completion of preparation for contact checklist. Failed to perform required checks during contact.

6.4.17. Area 215. Engine Running Onload/Offload

6.4.17.1. Q. Followed/explained proper procedures for engine running on/off loading.

6.4.17.2. Q-. Difficulty following/explaining proper procedures for engine running on/off loading.

6.4.17.3. U. Did not follow/explain proper procedures for engine running on/off loading.

6.4.18. Area 216. Systems Knowledge.

6.4.18.1. Systems knowledge may include, but are not limited to: Oxygen, Enhanced Cargo Handling System (ECHS), Ramp and Door, Auxiliary Power Unit (APU), Fuel System/Refueling, Advisory, Cautions and Warning System (ACAWS), Landing Gear, Hydraulic Systems, Electrical, CDS, Heavy equipment, Personnel, and Aerial Delivery System (ADS)

6.4.18.2. Q. Displayed satisfactory knowledge of systems, ensuring satisfactory operation within prescribed limits. Explained proper corrective action for each type of malfunction.

6.4.18.3. Q-. Difficulty in displaying a satisfactory knowledge of systems. Slow to analyze problems or apply proper corrective actions.

6.4.18.4. U. Failed to display a satisfactory knowledge of systems. Unable to analyze problems or apply proper corrective actions.

6.4.19. Area 217. Airdrop Rigging Procedures.

6.4.19.1. Q. Correctly rigged and identified key airdrop components.

6.4.19.2. Q-. Difficulty rigging and/or identifying key airdrop components.

6.4.19.3. U. Failed to rig and/or identify key airdrop components.

6.4.20. Area 218. Joint Airdrop Inspection.

6.4.20.1. Q. Correctly completed/explained the joint airdrop inspection (if required).

6.4.20.2. Q-. Had difficulty completing/explaining the joint airdrop inspection (if required).

6.4.20.3. U. Failed to or had extreme difficulty completing/explaining the joint airdrop inspection (if required).

6.4.21. Area 219. Coordinated Tasks Briefing.

6.4.21.1. Q. Correctly briefed the coordinated tasks IAW current directives. (if required)

6.4.21.2. Q-. Had difficulty briefing the coordinated tasks IAW current directives. (if required)

6.4.21.3. U. Failed to accomplish the coordinated tasks briefing IAW current directives. (if required)

6.4.22. Area 220. Airdrop Knowledge.

6.4.22.1. Evaluate the following areas: Personnel (Static line and High Altitude Low Opening (HALO)), CRL, CDS, door bundle, rescue drops, Standard Airdrop Training Bundle (SATB), and any other mission specific airdrop event. Any drops not performed in-flight may be verbally evaluated.

6.4.22.2. Q. Correctly demonstrated airdrop procedures for the event being flown, if performed. Knowledge of and airdrop load information and procedures for other types of loads were satisfactory.

6.4.22.3. Q-. Had difficulty demonstrating and/or understanding airdrop procedures and airdrop load information.

6.4.22.4. U. Could not demonstrate and/or understand airdrop procedures and airdrop load information.

6.4.23. Area 221. NVG Usage/Limitations.

6.4.23.1. Q. Correctly described the use/limitations of NVGs.

6.4.23.2. Q-. Minor omissions or deviations in describing the use/limitations of NVGs. Did not properly pre-flight, handle, or use NVGs during the flight, but caused no damage to equipment. Mission success was not negatively affected.

6.4.23.3. U. Procedures for using NVGs were incorrect. Caused damage to equipment. Mission unsuccessful as a result of improper NVG usage.

6.4.24. Area 222. Helicopter Air to Air Refueling (HAAR) System/Procedures.

6.4.24.1. Q. Knowledge of aerial refueling procedures was satisfactory. During fuel transfer operations relayed light signals without errors, deviations, or omissions. Transmitted clear, concise, timely information to the pilot concerning helicopter position throughout the refueling maneuver. Ensured emergency equipment was properly configured for the aerial refueling. Successfully demonstrated breakaway procedures or verbally evaluated to the satisfaction of the evaluator.

6.4.24.2. Q-. Limited knowledge of aerial refueling procedures. Minor deviations, errors, or omissions in relaying light signals during operations. Transmissions concerning helicopter position were not always clear and concise. At times used non-standard terminology. Slight deviations and errors in configuring emergency equipment for the aerial refueling. Emergency breakaway performed with minor discrepancies that did not affect safety or verbally evaluated event with minor discrepancies noted.

6.4.24.3. U. Had inadequate knowledge of aerial refueling procedures. Significant deviations, errors or omissions in relaying light signals during operations. Transmissions concerning helicopter position were unclear or erroneous. Failed to configure emergency equipment properly for the aerial refueling. Performed emergency breakaway with major discrepancies or verbally evaluated event with major errors noted.

6.4.25. Area 223. Combat Search and Rescue (CSAR)/Search Scanning Procedures.

6.4.25.1. Evaluate both threat and SAR scanning procedures.

6.4.25.2. Q. Knowledge of CSAR/search scanning procedures was satisfactory.

6.4.25.3. Q-. Limited knowledge of CSAR/search procedures. Minor difficulties in keeping scanners motivated. Did not adversely affect the mission.

6.4.25.4. U. Knowledge of CSAR/search procedures was unsatisfactory. Adversely affected the mission or jeopardized safety.

6.4.26. Area 224. Pyrotechnics.

6.4.26.1. Q. Had thorough knowledge of pyrotechnics. Could identify the appropriate pyrotechnics for the mission. Knowledge of ground and in-flight emergency procedures was satisfactory.

6.4.26.2. Q-. Limited knowledge of pyrotechnics. Did not always correctly identify the most efficient pyrotechnics for the mission, but safety was not affected.

6.4.26.3. U. Lacked knowledge of pyrotechnics. Could not identify appropriate pyrotechnics for the mission. Inadequate knowledge of emergency procedures; safety was compromised.

6.4.27. Area 225. Combat Offload.

6.4.27.1. Q. Followed/explained proper procedures for combat offload operations.

6.4.27.2. Q-. Had difficulty following/explaining proper procedures for combat offload operations.

6.4.27.3. U. Did not follow/explain proper procedure for combat offload operations.

6.4.28. Area 226. Defensive Tactics/Threat Calls.

6.4.28.1. Q. Satisfactory knowledge of defensive tactics employed by HC -130 aircraft. Properly identified threats and the maneuvers required to defeat them. Explained proper scanning techniques from the troop doors and ramp and door.

6.4.28.2. Q-. Limited knowledge of proper scanning techniques. Limited ability to identify threats and the maneuvers required to defeat them.

6.4.28.3. U. Had inadequate knowledge of proper scanning techniques. Could not identify threats, or state maneuvers to defeat the threat.

6.4.29. Area 227. Forward Area Refueling Point (FARP).

6.4.29.1. Q. Satisfactorily demonstrated or explained knowledge of Hot Refueling Supervisor (HRS) and Panel Operator (PO) duties, FARP equipment, and emergency procedures. Satisfactorily performed or explained all items associated with HRS or PO duties, exercised sound crew coordination principles, and situational awareness.

6.4.29.2. Q-. Minor deviations in knowledge associated with HRS and PO duties and FARP equipment. Minor omissions in procedures during performance of HRS or PO duties.

6.4.29.3. U. Lacks adequate knowledge to safely perform FARP duties to include HRS/PO duties, FARP equipment, and/or emergency procedures. Could not perform HRS or PO duties to the extent of creating unnecessary delays and/or jeopardizing FARP completion. Could not exercise sound crew coordination and/or situational awareness.

6.4.30. Area 228. Hot Refueling.

6.4.30.1. Q. Safely performed or explained all hot refueling procedures in a safe manner and in compliance with all established procedures/applicable directives.

6.4.30.2. Q-. Minor deviations from established procedures/applicable directives. Deviations did not affect safety of the refueling operation.

6.4.30.3. U. Unable to perform or explain refueling operation safely or in accordance with established procedures/applicable directives.

6.4.31. Area 229. Infiltration/Exfiltration Procedures

6.4.31.1. Q. Followed/explained proper procedures for NVG infiltration/exfiltration operations.

6.4.31.2. Q-. Difficulty following/explaining proper procedures for NVG infiltration/exfiltration operations.

6.4.31.3. U. Did not follow/explain proper procedures for NVG infiltration/exfiltration operations or safety compromised the operation.

6.4.32. Areas 230 through 250. Reserved for future use.

HERBERT J. CARLISLE, Lt Gen, USAF
DCS, Operations, Plans and Requirements

ATTACHMENT 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 11-200, Aircrew Training, Standardization/Evaluation, and General Operations Structure, 19 Jan 12

AFI 11-202V1, Aircrew Training, 22 Nov 10

AFI 11-202V2, Aircrew Standardization/Evaluation Program, 13 Sep 10

AFI 11-202V3, General Flight Rules, 22 Oct 10

AFI 11-215, Flight Manuals Program (FMP), 3 Jan 11

AFI 11-218, Aircraft Operations and Movement on the Ground, 11 May 05

AFI 11-235, Forward Area Refueling Point (FARP) Operations, 15 Dec 00

AFI 11-290, Cockpit/Crew Resource Management Training Program, 11 Apr 01

AFI 11-301 Volume 1, Aircrew Flight Equipment (AFE) Program, 25 Feb 09

AFI 11-401, Aviation Management, 10 Dec 10

AFI 11-403, Aerospace Physiological Training Program, 20 Feb 01

AFI 33-360, Publications and Forms Management, 18 May 06

AFI 33-364, Records Disposition—Procedures and Responsibilities, 22 Dec 06

AFMAN 11-217, Volumes 1, Instrument Flight Procedures, 22 Oct 10

AFMAN 11-217, Volume 2, Visual Flight Procedures, 22 Oct 10

AFMAN 11-217, Volumes 3, Supplemental flight Information, 23 Feb 09

AFJMAN 24-204, Preparing Hazardous Materials for Military Air Shipments, 1 Sep 09

AFFD 33-3, Air Force Information Management, 28 Mar 06

T.O. 00-25-172, Ground Servicing of Aircraft and Static Grounding/Bonding (ATOS), 17 Jul 09

Forms Adopted

AF Form 8, Certificate of Aircrew Qualification,

AF Form 847, Recommendation for Change of Publication

AF Form 4031, CRM Skills Criteria Training/Evaluation

Abbreviations and Acronyms

AAR—Air to Air Refueling

ACAWS—Advisory, Cautions and Warning System

ADS—Aerial Delivery System

AFI—Air Force instruction

ANG—Air National Guard
APU—Auxiliary Power Unit
ARCP—Air Refueling Control Point
ASR—Airport Surveillance Radar
CARP—Computed Air Release Point
CDS—Container Delivery System
CEOI—Communication Electronic Operating Instructions
COMSEC—Communications Security
CNI-MU—Communication/Navigation/Identification-Management Unit
CRL—Container Ramp Load
CRM—Crew Resource Management
CSAR—Combat Search and Rescue
CSO—Combat Systems Officer
DF—Direction Finding
DR—Dead Reckoning
ECHS—Enhanced Cargo Handling System
ECU—Environmental Control Unit
ELT—Emergency Locator Transmitter
EMCON—Emission Control
EP—Emergency Procedures
EPE—Emergency Procedures Evaluation
ETA—Estimated Time of Arrival
FCIF—Flight Crew Information File
FTU—Formal Training Unit
GPS—Global Positioning System
HAAR—Helicopter Air to Air Refueling
HALO—High Altitude Low Opening
HHQ—Higher Headquarters
HQ—Headquarters
IAW—In Accordance With
ICAO—International Civil Aviation Organization
IPRA—Integrated Precision Radar Approach

IFF—Identification, Friend or Foe
ILS—Instrument Landing System
INS—Inertial Navigation System
IP—Instructor Pilot
KIAS—Knots Indicated Airspeed
MAC—Mean Aerodynamic Chord
MAJCOM—Major Command
MAP—Missed Approach Point
MDA—Minimum Descent Altitude
MFCD—Multifunction Control Display
MOS—Minimum Operating Speed
MPD—Mobility Pilot Development
MSN—Mission
N/A—Not Available or Not Applicable
NM—Nautical Mile
NOTAM—Notice to Airman
OGV—Operations Group Standardization/Evaluation
ORM—Operational Risk Management
PAR—Precision Approach
QUAL—Qualification
RNP—Required Navigation Performance
SAR—Search and Rescue
SATB—Standard Airdrop Training Bundle
SCA—Self Contained approach
SCNS—Self Contained Navigation System
SINCGARS—Single Channel Ground/Air Radio System
SNS—Satellite Navigation Station
STAN/EVAL—Standardization/Evaluation
TACAN—Tactical Air Navigation
TAS—True Airspeed
TOLD—Take-Off and Landing Data
TOT—Time on Target

VDP—Visual Descent Point

VFR—Visual Flight Rules

VOR—Very High Frequency Omni-Directional Range Station

WST—Weapons System Trainer □

Terms

Airland—To land (persons, equipment, etc.) by aircraft.

Deviation—Performing an action not in sequence with current procedures, directives, or instructions. Performing action(s) out of sequence due to unusual or extenuating circumstances is not considered a deviation. In some cases, momentary deviations may be acceptable; however, cumulative momentary deviations will be considered in determining the overall qualification level.

Minor Error—Departure from standard procedures. Performing incorrect actions or recording incorrect information. Error did not detract from mission accomplishment, adversely affect use of equipment, or violate safety.

Major Error—Performing incorrect actions or recording incorrect information. Error detracted from mission accomplishment, adversely affected use of equipment, or violated safety.